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THE INCARNATION.

During his exile in St. Helena, Napoleon is reported to have spoken in the following terms in the course of a conversation about Jesus Christ; "I have inspired multitudes with such an enthusiastic devotion that they would have died for me, . . . but to do this it was necessary that I should be visibly present, with the electric influence of my looks, of my words, of my voice. When I saw men and spoke to them, I lighted up the flame of self-devotion in their hearts. Christ alone has succeeded in so raising the mind of man towards the unseen, that it becomes insensible to the barriers of time and space. Across a chasm of eighteen hundred years, Jesus Christ makes a demand, which is beyond all others difficult to satisfy; He asks for that which a philosopher may often seek in vain at the hands of his friends, or a father of his children, or a bride of her spouse, or a man of his brother. He asks for the human heart, He will have it entirely to himself, He demands it unconditionally; and forthwith his demand is granted. Wonderful! In defiance of time and space, the soul of man with all its powers and faculties, becomes an annexation to the empire of Christ. All who sincerely believe in him, experience that remarkable supernatural love towards him. This phenomenon is unaccountable; it is altogether beyond

the scope of man's creative powers. Time, the great destroyer, is powerless to extinguish this sacred flame; time can neither exhaust its strength nor put a limit to its range. This it is which strikes me most; I have often thought of it. This it is which proves to me quite convincingly the divinity of Jesus Christ."

The judgment of any one who looks at the facts must be the same as that of Napoleon, that Christ is somehow different from all the other actors who have crossed the world's stage. Jesus of Nazareth is a unique figure in the portrait gallery of the world. His features resemble those of no one who went before him, and of none who have come after him, save those who have been moulded by His Spirit. Compare him with the mightiest and most original rulers who have shaped the course of history, and you feel that His kingliness is of another order from theirs. Compare Him with the wisest teachers who have proposed themselves as the guides of their fellow-men in the spiritual regions, and you feel that His insight is keen, far reaching, and His step sure as those of none other. Compare Him with the men who have won the highest reputation for goodness, and you feel that in Christ humanity has flowered into a beauty and perfection that have been visible nowhere else. Look at Jesus how you will, you feel that with Him there has appeared a new figure in the world, a creative type—inexplicable by the various types that previously existed. "If," to quote the words of an American writer, "amid the ancestral pictures which hang upon the walls of some old English Manor house, and which betray the same noble lineage through many generations—the features of some far-off ancestor re-appearing, perhaps, in the last portrait hung among those of the dead—we should notice a face unlike all before it, having eyes of southern fire, or beauty of another clime; we should at once conclude that the strange countenance represented some other line of descent; that its presence there could not be explained by the laws of heredity, working through the English blood; and that an altogether new element, at that point, had come into the family line. But in the world's gallery of illustrious persons we find introduced in the portraiture of the Evangelists, a countenance never seen before on earth. It is neither a Jewish nor a Gentile face; it resembles none before it; it is like itself alone."*

Moreover the place Christ occupies in His religion is altogether

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* *Old Faiths in a New Light*, by Newman Smyth; p. 169.

unique. He is not merely a prophet who reveals the spiritual world. He is himself the centre of the spiritual world He reveals. He does not merely lay down laws for his followers to obey, He offers Himself as the embodiment of goodness for all to imitate. He does not merely help men to know and love God, but in the knowledge and love of Himself true religion is obtained. Fellowship with Himself is the highest good, the highest blessedness. Christianity is Christ in a sense in which it cannot be said that Mosaism is Moses, or Mahomedanism Mahomed, or Buddhism Buddha.

This also has to be noted in regard to Christ, that He has been a centre of spiritual force during these eighteen centuries, to which there is no parallel in the history of the world. Founders of other religions, such as Mahomed and Buddha, have exercised a profound influence on the course of history, but none have set up such a moral and spiritual ferment as the crucified prophet of Nazareth. A new ideal of manhood has been put before men—a manhood that is nothing less than Christhood. New virtues have been created, such as meekness and the forgiveness of enemies. Sins of the flesh have been condemned with an emphasis that has purified the moral atmosphere. A new reverence for womanhood, and a new tenderness for children have given us a new family life. A new feeling of the inherent dignity of every man, of the inherent Christ in every man, has sweetened the breath of social life. The sense of Christ's relation to the whole human race has given birth to at least the dream of a universal brotherhood, and has led to the recognition of the solidarity of the race—that community of interest which is best expressed in the Apostle's words: "Whether one member suffer, all the members suffer with it; or one member be honoured, all the members rejoice with it."

Christ is the centre from which has radiated forth the spiritual power that has initiated and sustained these and similar movements. He has inspired the men who have been the moral pioneers of Christendom. He is acknowledged to be the secret power of those whose lives, flowering in their heavenly purity, show so fair in comparison with the highest types of Greek or Roman virtue. He has been consciously at the heart of most of the lives of heroism, and self-sacrifice, that have never been wanting from the world since he entered it. And not only has he been consciously the root from which have sprung the fairest moral flowers and fruits which have blessed the Christian nations, but he has been the remote inspiration of many of the best efforts of men who refuse to call him Lord.

As a spiritual force he has been let down into the world, and as a spiritual force he has leavened humanity to a degree that may well lead us to ask whence came the force that could produce such results.

Looking then at the facts as history brings them before us, we find that Jesus of Nazareth is a unique personality even amongst the greatest of the race, that he occupies a unique place in Christianity, a place not occupied by Moses in Judaism or Mahomed in Mahomedanism, and that he has been a unique force in the moral, and spiritual development of humanity. The person of Christ, it is plain, has a prime significance in Christianity. That constitutes the heart of the whole movement; it is the very life of the religion. It is therefore natural that in every age of the Church this question should ever have been in the fore front in theology, Who and what is Christ?

To discuss all the possible answers that may be given to this question is not now my intention I wish simply to take up one answer that has been given—the answer that has been given in the creed of the Church Catholic—which is substantially the answer given by St. John in the prologue to his gospel, "The word became flesh and dwelt among us (and we beheld his glory, glory as of the only begotten from the Father) full of grace and truth."

To the question, Who is Christ? the creed of Christianiy replies, God who became man, the Word who became flesh, God Incarnate, or more shortly, the God man. The doctrine of the Incarnation is the account the Church gives of the person of Christ, and the explanation the Church gives of the meaning and power of Christianity.

But is such an Incarnation possible? God became man. The eternal Word became flesh. Such a statement, it is said, is staggering to human reason, if not altogether incredible. And even theologians sometimes tell us that the doctrine of the Incarnation is a mystery of which reason can make nothing, a mystery, however, which we are bound to believe, because it is vouched for by the sacred scriptures. Of course there is a mystery in the Incarnation, as there is a mystery in the union of soul and body, as there is a mystery indeed in every fact—even the simplest—of human experience. But it would surely be a very strange thing, if the Incarnation which is the very centre of divine revelation should turn out to be no revelation, but essentially a mystery with which we can do nothing but blindly accept it on external authority. The doctrine of the Incarnation could never have taken such a deep hold of the heart of Christendom, unless it had been

felt to be something more than a mystery, to be in a very real sense a light-giving doctrine, a revelation both about God and about man, and it would have a very precarious footing in the creed of Christianity to-day, could it not appeal, and make good its appeal, to men's intelligence.

The difficulty of accepting the doctrine that God became man arises largely from a peculiar view either of what man is or of what God is. We may entertain such a poor opinion of what man is, that we are sure to stumble at the idea of a God-man. If we look at man as but a puny part of the mighty material universe, as but one of the countless creatures that live out their little day and return again to the dust whence they sprang, it is hard to see how there can be room for God in man so regarded. But this is no true account of human nature. Puny as man is, he is in reality greater than the universe that seems to mock him with its resistless and eternal forces. "Man is but a reed," says Pascal, "one of the feeblest of reeds, but he is a reed that thinks. To crush him, the whole universe does not need to arm itself; a drop of water is sufficient. But when the universe crushes him, man is even then nobler than that which kills him, for he knows that he is being crushed, while the universe knows not that it is crushing him." In his material organisation man is indeed but a puny part of the mighty universe, but by his power of thought, he rises above the universe, and claims kindred with the eternal and infinite spirit from whose thought the universe has sprung.

And still more does man claim kindred with God by his conscience and moral nature. It is possible, to give such an exaggerated account of man's natural depravity as greatly to increase the difficulty of accepting the statement that God became man; it is possible so to degrade human nature as to make it inconceivable that God could have assumed it. But the grandeur of human nature is seen even in its ruins. The protest of conscience against sin, the tone of magisterial authority in which it utters its protest, the remorse which follows on the neglect of its warnings, stand forth like a few broken columns that bear their own pathetic testimony to the original grandeur of the temple. His dissatisfaction with the satisfaction he has sought from the world, the unrest that is continually gnawing at his heart, the aspirations he sometimes experiences after a higher good, the sighing after a nobler life, and the longing for God—these things show that fallen as he is there is a spark of divinity slumbering within him.

The temple of humanity in its ruined desolate state, with its few broken columns overgrown with noxious weeds, and its fragments of capital and frieze lying amongst the refuse, was no fit dwelling place for the Most High. But were the refuse of the ages removed, and the building restored in its ideal completeness and beauty, who shall say that such a temple was unworthy even of the Highest, who shall say that in Jesus Christ—man in his ideal completeness and beauty—God could not become incarnate?

But difficulties in connection with the Incarnation spring more often perhaps from a poor opinion of what God is than from a poor opinion of what man is.

What is God? Is He merely the Almighty Creator, who has set the machine of the universe agoing? Is His power the deepest thing in His being? and does He dwell apart in the eternal serenity of His omniscience and omnipotence?

If we answer Yes to these questions, it will be difficult to understand not only how God could become man, but *why* He should. It would be difficult to understand what motion could impel a being of almighty power to confine himself within the limits of humanity. The doctrine of the Incarnation will not fit into a theory that finds the essence of the Godhead in infinite power or in a mere sovereign will, and it is useless to argue for the doctrine on such a basis, for until men come to look upon God in a different light, they are not likely to get even within sight of the Incarnation, of God becoming man.

But is power, or a mere sovereign will, the deepest thing in God? To say so were to degrade God. Power is not the grandest thing in the universe. Spiritual character is a grander thing. To be pure in heart is a grander thing than to rule an empire. To be humble and unselfish is a grander thing than to have hundreds of thousands cowering at one's feet. To be Jesus Christ is a grander thing than to be Napoleon.

Spiritual character is the noblest element in manhood: it is also the noblest element in the Godhead. It is here—in God's spiritual character—that we begin to understand how the Incarnation is possible. If His children have wandered from him and got hopelessly lost in the dark wilderness of sin, and if they need a helping hand held out from above to save them, can God, if He is a Father of love, stand aloof in his serenity, and wait till His lost children find their way back to Him? "A mother's place is down amongst her suffering children." Surely a Heavenly Father's place is down

amongst His children—the sinning and sorrowing children who need His help.

But the objection is still urged: Granted that God in becoming man, in coming down into our midst as one of us, in speaking to us with a brother's voice, and touching us with a brother's hand could win his way to our hearts and get a lever for lifting us into a purer and worthier life, as He never could by dwelling on high in a self-centred sphere of eternal holiness and blessedness, is the thing possible? Possible? Is God then to be shut out from the highest spiritual life? Is His love to be denied the highest outcome of love—the privilege of stooping and suffering for others? There must be room within the divine nature for the love that stoops to save. If God is indeed the highest—not merely the highest in power or knowledge, but the Highest in goodness, it must be possible for him to lay his glory by, to humble Himself and become obedient unto death, even the death of the cross.

But granting the possibility of the Incarnation, it will still be asked, Is there any proof that it ever took place? The Incarnation is something more than an abstract doctrine of a theological system: it is a divine fact charged with the weightiest meanings for our daily life. The proof that is adduced for it must be more than the citation of scripture texts; it must also appeal to our inward experience. It must be shown how the doctrine is rooted in the facts of our moral and spiritual nature, and how it is fitted into human history, how it explains this history, and how it makes this history.

The proof of the existence of God lies not only in the Bible, but also in our inward experience. In like manner the doctrine of the Incarnation has its roots in human experience and human history. Were it otherwise, proof texts would scarcely convince men of its truth. We believe in the Bible because we believe in Christ the Incarnate God, rather than in the Incarnate God because we believe in the Bible.

The doctrine of the Incarnation is in profound harmony with the highest view of the spiritual nature of God. It satisfies the longing of the human soul to have God near it, breathing in human flesh, and speaking in human voice. The fundamental craving in religion is a craving for union and communion with God; in the Incarnation religion is seen to have attained its goal—God and man are one.

But, without lingering on the proofs of the Incarnation which arise from its satisfaction of human needs, look now at what Jesus

Christ says of himself. He claims the right to forgive sins. He claims to be the judge of mankind. He asserts that he is to be with his disciples to the end of the world. "Come unto *me*," he dares to say, "all ye that labour and are heavy laden, and I will give you rest." And again "He that loveth father or mother more than me, and he that loveth son or daughter more than me is not worthy of me." These are some of the claims that we find he makes for himself in the first three gospels, claims that are as strong if not so fully expressed as those he makes in John's Gospel. There we come across such sayings as these: "Which of you convinceth me of sin?" "I am the light of the world." "I am the way, the truth, and the life." "I and my Father are one." "Before Abraham was, I am." "I am from above......I am not of this world. I came forth from the Father."

It is seldom seriously questioned in these days that Jesus claimed to stand in a quite unique relation to God. The old Unitarian view is becoming every day more discredited. Critics like Renan frankly admit that Jesus claimed to be divine, and get rid of the claim by attributing it to self-delusion.

Did this claim stand out as an isolated fact, critics might be justified in dealing with it in this fashion. But it is no isolated fact. It is made by one who had confessedly the clearest insight of all who have ever lived into the spiritual world, and by one who, if the kingliest of men, was also the humblest; and this claim moreover appeals to the purest aspirations of those who strive most earnestly after union and communion with God. It throws the brightest light upon the facts of human experience and human history, and it is justified by the spiritual force with which He who made it has worked in millions of hearts during these eighteen centuries.

But the chief proof of the Incarnation is, after all, to be found in its *significance*, in the way in which the doctrine interprets and moulds human experience.

The significance of the Incarnation is a subject of immense scope. It involves nothing less than the significance of Christianity, for the God-man, Jesus Christ, is the heart of the whole Christian religion, the power that explains the whole round of the triumphs it has won. I can but glance at one or two of the ways in which the fact of the Incarnation—God becoming incarnate in Christ—has worked as a spiritual force in human history.

Notice, in the first place, its effect on men's conception of God. The Incarnation directs our attention in a very special way to

the spiritual character of God. It stands as a barrier against all attempts to overshadow the moral and spiritual elements of the divine nature with such attributes as omnipotence and omniscience. In these days of such splendid progress in the material sciences, there is a tendency to regard God (to use a phrase of Mr. Beecher's), as "the great scientific head of the universe." His power, His skill, His immensity, His eternity are the elements that modern science tends to bring into prominence. The Incarnation is a witness—that speaks with Heaven's own eloquence,—to still deeper and grander elements. God is above all a Father, a Father of love. There is sympathy in His heart with His sinning and sorrowing children, sympathy that stretches out a redeeming hand. There is divine heroism in His nature that finds an outlet for itself in stooping to the level of humanity. The Incarnation reveals to us perfect goodness, absolute love as the heart of the Godhead, the innermost principle of the universe, and in revealing perfect goodness as the heart of the Godhead, it has proclaimed this perfect goodness to be also the goal, and glory of manhood.

The Incarnation, moreover, brings God so near that men's hearts may lay hold of Him. "It is not easy," says Plato, to "find the Father and Creator of all existence, and when He is found, it is impossible to make Him known to all." The God of the metaphysicians, it must be confessed, is easy neither to find nor to make known. God, we are told, is the infinite and absolute. 'Infinite substance,' says Spinoza, 'Absolute thought,' says Hegel. Such a God does not appeal to men's hearts. He is a shadowy ideal that is apt to elude the grasp of thought as well as of affection. "I have often said" was the remark of the great historian Niebhur, "that I know not what to do with a metaphysical God, and that I will have none other than the God of the Bible who is heart to heart."

It is the Incarnation that has given men a God they can love, trust, and serve with the devotion of their whole life, and as a matter of history, it is where the Incarnation has been believed in that God has been most widely, most purely worshipped. God in Christ, God in human flesh, speaking to men with a human voice, and feeling for them with a human heart, is intelligible by all, lovable and adorable by all.

It is a significant fact that the modern religion of humanity is in the main an organised protest against the worship of a metaphysical God. Positivists refuse to fall down before a God who is but the ultimate ground of the universe, the unknowable substratum of

all things, or at best an omnipotent ruler, and set up as the object of their worship Humanity, specialised in a mother, or sister, or wife. To a certain extent the protest of the Positivists is justified. It is better to worship a mother or wife than a Being whose essence is mere power, for motherly or wifely love is a nobler thing than omnipotence. It is better to worship Humanity than such a shadowy abstraction as the Infinite or Absolute, for in humanity there is something which love, trust, devotion can lay hold of. The worship of the best men and women we know would have a more ennobling influence on our life than the worship of a God who is but the Supreme Being who dwells in the remoteness of his solitary majesty. The moral and spiritual elements of humanity are far worthier of our regard than aught else that exists in the universe.

But surely the Incarnation teaches us that all that is highest in humanity, worthiest of our regard, exists in still nobler form in God. In God there is, if I may so say, a human side. The eternal Word is the divine prototype of humanity—and in the eternal Word become flesh, there is, even from the stand point of the Positivists themselves, a nobler object of our worship, of our love, trust, devotion—than can be found amongst those whom we have best cause to love and reverence, and best cause to thank for the higher aims, the warmer enthusiasms with which they have inspired us.

Notice, in the second place, the changed view the Incarnation has given us of manhood. Manhood under Christ is, as I have already said, Christhood. Manliness is Christliness. To be a true man is to be like the God-man, Jesus Christ.

It is sometimes said that the appearance of such a God-man would be a violation of natural order. Is it not rather in profoundest harmony with it? Is not such a development in humanity in accordance with what we know of the evolution that has been going on in the universe? First, there was the inorganic period, when life did not yet exist. Then came the period of organic life. One species of animals was succeeded by a still higher, till man himself was reached, and last of all within humanity there was introduced the highest life of all—the life of the perfect man.

But however the appearance of Christ in the race (of humanity) is to be related to the divine evolution that is going on in the universe, it is a matter of history that the Incarnation has introduced and emphasized a new idea of manhood. The Incarnation has opened up a new vista of the possibilities of human nature, and given men a new sense of the wonderfulness of their life, and a new

sense of their responsibility to make it worthy of the divine purpose. Likeness to Christ—perfect union and communion with God—such a destiny is fitted to elevate men's aims and fire their enthusiasm. The thought of a possible Christ in them is a stimulus born of the weight of responsibility.

And what shall we say of the effect of the Incarnation in men's treatment of their fellows? It has worked nothing less than a revolution. Whence has come the sacred interest that centres round the life of children in Christendom? From the Incarnation—from the God-man who was himself a child and loved the children. Whence has come the new reverence that is paid to womanhood, and the new influence woman has acquired in the world? From the Incarnation, from the consecration of motherhood by God becoming incarnate of the Holy Ghost in the womb of the Virgin Mary, and from Christ's own purest reverence for the sex. Whence has come the abolition of slavery and the passionate hatred with which the system is regarded? From the Incarnation, from the consecration of manhood by Christ sharing it. Whence comes in our own day the inspiration of movements for the nobler development of the members of the body politic, and for the elevation of the fallen and degraded? From the Incarnation, from the Christ who was the brother of every man and woman, however degraded, from the Christ who died to save them

Notice in the third place, what a bright light the Incarnation has shed on the meaning of human history. Viewed from one side, the march of humanity along the ages is a sight that may well touch a thoughtful man with a noble sorrow. What blind striving! What heroic struggles ending in defeat! What crimes have cursed the earth! What follies have wrecked high aims! What strifes, hatreds rending societies and nations! What a bitter wail ascending from earth's millions to Heaven's God above! With what sins and sorrows, with what wreckage of hopes and purposes, with what defects and desolation has the weary track of humanity been strewn!

Thought might well sink under the burden of this unintelligible world, did not the Incarnation throw light upon the mystery. That march of humanity generation after generation, through defeats, and failures, through sadness and darkness, through sin and sorrow has a meaning. Its goal is Christ, the woes of humanity are the birth-throes that accompany the coming of the God-man into the race.

When humanity is seen to culminate in the Christ there begins

to be visible in the tangled skein of human history a divine order. The Incarnation is our sure witness that a divine purpose was running through the ages, and that the whole creation was moving towards "one far off divine event." The appearance of the God-man Jesus Christ is the justification of the world and its woes, and the answer to cynics and pessimists who proclaim that human life is a mockery and the world in general a mistake. And when the whole human race is seen in its relation to the Son of Man—the true root of humanity and the true ideal of humanity, in what a new light does it stand out! "What God was to Jesus" says a recent writer, "He might be to every man, and what Jesus was to God every man might be." In Christ a new humanity is to be constituted. He is *the man* in whom the whole race is to find a common centre.

Christ has a universal significance. Though a Jew, he was not Jewish—Greeks and barbarians equally with the Jews found him to be their brother. Though a man, he had all the graces of the womanly character, and appeals to women equally with men. Though a peasant carpenter, he is the brother of all—high and low, rich and poor, simply on the ground of his humanity. Though of the first century, he belongs as much to the nineteenth and all the centuries that shall be, for he belongs to eternity.

Christ is the new life that is to redeem and regenerate humanity, and his new life is to be the bond that is to bind men into a sacred brotherhood. He is to be the King of that new kingdom, in which all the members, rooted in a common life, the life of the God-man, are to be fellow workers one with another and with God. When all things are subject to Him, then shall cease family strifes, social alienations, class jealousies, sectarian rivalries, national hatreds and race antipathies. God shall become incarnate a second time—incarnate in the human family.

There shall come from out this noise of strife and groaning
A broader and a juster brotherhood,
A deep equality of aim, postponing
All selfish seeking to the general good.
There shall come a time when each shall to another
Be as Christ would have him—brother unto brother.

Oh glorious end! oh blessed consummation!
Oh precious day, for which we wait and yearn!
Thou shalt come, and knit men nation into nation,
But not for us, who watch to-day, and burn,
Thou shalt come, but after what long long years of trial
Weary watching, baffled longings, dull denial.

D. M. Ross.

MORALITY OF THE MAHABHARATA.

It has often been remarked, that, whereas science has made immense strides since the early days of Greek philosophy, metaphysics and moral philosophy have remained stationary, so that modern philosophers, though in different terms, now discuss the very same problems as occupied the minds of Plato and Aristotle, and are no nearer their solution. An examination of Sanskrit literature shows that the unprogressive character of metaphysics and ethics may be still further illustrated. Berkeley's ideal theory was held by the later Vedanta school many centuries before Bishop Berkeley was born. Sanskrit philosophers such as Kanada, and Charvaka at a very early age discovered for themselves atomism, materialism, and many other logical and metaphysical doctrines, that have been vigorously defended and opposed again and again by successive generations of European philosophers. Schopenhauer, whose philosophy is believed by many to be the philosophy of the future, in spite of the lapse of time that intervened between himself and them, thought that the ancient philosophers of India together with Plato and Kant saw more deeply into the nature of things than any other of his predecessors. Exhaustively to detail all the parallelism existing between Indian and European philosophy would be almost the labour of a life time. It is possible however to get a few definite ideas on the subject by confining our attention to a limited portion of Sanskrit literature and a limited portion of the whole range of philosophy.

An examination of the moral philosophy contained in the *Mahabharata* would show that the author or authors of that great epic had clearly thought out some of the most important questions that are now discussed by modern moralists. Professor Monier Williams has collected in his *Indian Wisdom* a number of moral precepts out of the *Mahabharata* which certainly testify to the very high morality of the writers. It is not, however, fair to regard them as average specimens of the morality of this immense poem. The *Mahabharata*, a poem or collection of poems twelve times as large as the *Iliad*, and the work of different authors, is composed of nobler and baser materials. A careful selection of the most exalted sentiments it contains, unless taken side by side with such other passages as are in conflict with our ideas of right and wrong, would give a misleading idea of the general

moral atmosphere of the poem. We must remember that several very base deeds are ascribed to the heroes and even to those gods who take an active part in the action. The five human heroes of the poem are the sons of Pandu, who are collectively represented as being far superior in virtue to their enemies the Kauravas. The eldest of the five is held up to our admiration as a pattern of perfect virtue, while the other four, though not represented as free from failings, are evidently intended to be heroic in character. Yet we find that they are all married to one wife and thus brought down to the level of the barbarous Todas, among whom polyandry is still practised. Such a union is utterly repulsive to the moral sentiments of all civilized nations in the East as well as the West. In the rest of the conduct of the five Pandavas we find a good deal that is opposed to our ideas of what ought to be. Perhaps the worst act told of them in the *Mahabharata* is the story of the burning house. The five Pandavas with their mother were invited by their enemies to a house, which was built of inflammable materials, in order that it might be burnt over their heads. Hearing of the plot they got an underground passage made, so that they might be able to escape when the house was set on fire. One night an outcaste woman with her five children came to receive charity from the Pandavas. They drank till they were unconscious and lay down in the house oppressed with sleep and wine. Then Bhima himself set fire to the house, and escaped with his four brothers and mother by the underground passage leaving the outcaste woman and her five children to their fate. They were burnt alive and their charred corpses were mistaken for the bodies of the Pandavas, which was so convenient that it looks as if they had been left behind on purpose to conceal their flight. At any rate Bhima and his brothers seem not to have had the least concern for the six innocent persons that they left to perish by a horrible death.

When we examine the characters of the five brothers separately we find that several of their actions are so bad that their being attributed to the heroes of the poem must have a bad moral effect on those who try to find in it heroic examples for their guidance in life. Even the otherwise perfect Yudhishthira's character is marred by reckless gambling and a tendency to cowardice. As a gambler he pledged his kingdom, his brothers, himself, and even his wife. His cowardice is shown on one occasion when he flies before Drona on a fleet horse, and on another when he sends his nephew, a boy of sixteen years, to almost certain death instead of

going himself on the dangerous enterprise. Bhima the second brother disgraces himself by many acts of ferocity, such as could scarcely be paralleled in the actions of the heroes of any European fictions. In the *Iliad* Achilles exclaims in his fury that he would like to eat the flesh of his enemy, Hector, but never really thinks of doing so. In the *Mahabharata* Bhima after cutting off the head of his enemy, Duhsasana, catches the blood in his two hands and actually drinks it up exclaiming "Ho! ho! Never did I taste anything in the world so sweet as this blood." Again in his battle with Duryodhana he strikes him with his mace on the thigh, which in a combat with the mace is considered to be foul play. The base blow breaks Duryodhana's thigh and brings him to the ground, whereupon Bhima brutally kicks his fallen enemy on the head. Such acts as these cannot be justified even by consideration of the deadly insults they were intended to avenge. Arjuna, who according to Professor Monier Williams "may be regarded as the real hero of the *Mahabharata*, of undaunted bravery, generous, with refined and delicate sensibilities, tender-hearted, forgiving, and affectionate as a woman, yet of superhuman strength, and matchless in arms and athletic exercises," nevertheless takes an unfair advantage of Karna, when that hero is trying to disengage his chariot wheel. He also gives the hint to Bhima suggesting that he should use foul play and strike Duryodhana on the thigh.

Both these base actions of the two younger Pandavas are, strange to say, suggested by the god Krishna, who also suggested the following extraordinary prevarication to effect the death of the formidable Drona. Krishna advised Yudhishthira to tell a lie to Drona and falsely inform him that his son Aswatthama was dead in order that grief might make him throw down his arms. This the virtuous Yudhishthira refused to do. Krishna then found a way out of the difficulty by getting an elephant called Aswatthama killed. Bhima killed the elephant and told Drona that Aswatthama was dead. Drona would not believe Bhima and asked Yudhishthira, whose reputation for virtue was a sufficient guarantee that he would speak the truth, whether his son was really dead. Yudhishthira in answer to the question said "Aswatthama is dead; not indeed the man, but the elephant." But Krishna and Arjuna made such a noise directly Yudhishthira had said "Aswatthama is dead," that Drona could not hear the following words. This incident shows Bhima, Krishna, and even Arjuna, who is represented in the poem as a man who never told a lie, all joining in a mean prevarication. Even Yudhishthira's con-

duct is a little suspicious in the matter. It must in fairness be acknowledged, that some of the deviations from ordinary morality, which mar the characters of the heroes of the *Mahabharata* do not pass uncondemned in the poem itself. Thus Yudhishthira strikes his brother Bhima in the face for his baseness in striking Duryodhana on the thigh. But very many bad acts are narrated without either praise or blame, as if they did not at all detract from the heroism of the actors.

But if we find in some of the actions ascribed to the heroes a very low ideal of morality, throughout the poem in the sentiments expressed we have wonderful anticipations of the highest precepts of European religion and philosophy. Some of the most remarkable of these moral sentiments culled from various portions of the *Ramayana* and *Mahabharata* may be found translated into blank verse by Professor Monier Williams in his *Indian Wisdom*.

> "Do naught to others which if done to thee
> Would cause thee pain; this is the sum of duty"
>
> *Mahabharata* v, 1537.

is an anticipation not only of the golden rule of Christianity, but also of the categorical imperative of Kant, that bids us only act on a rule that we could will to be law universal.

> "Bear railing words with patience, never meet
> An angry man with anger, nor return
> Reviling for reviling, smite not him
> Who smites thee; let thy speech and acts be gentle."
>
> *Mahabharata* v, 1270.

is a passage that reminds us of Socrates' assertion that it is better to suffer than inflict injustice, and still more of the words of Christ, Luke vi, 27—29.

> "Just heaven is not so pleased with costly gifts,
> Offered in hope of future recompense,
> As with the merest trifle set apart
> From honest gains, and sanctified by faith."
>
> *Mahabharata* xiv, 2788.

is the same truth as Christ inculcated, when he called the attention of his disciples to the contrast between the rich men offering costly gifts out of their abundance, and the poor widow who out of her want cast in her two mites, all that she had, even all her living. There are about fifty similar extracts from the *Mahabharata* quoted by Professor Monier Williams, most of which are in the same high strain, inculcating a far more advanced morality than is to be found

anywhere in the literature of Greece and Rome except in the works of one or two professed moral philosophers.

Although the *Mahabharata* is popularly ascribed to one author called Vyasa, it is believed by Sanskrit scholars to have really been the work of several centuries from 500 B. C. to the second or third century of our era. This theory would of course give an easy explanation of the divergence of moral sentiment to be found in different parts of the poem. Only a very wide interval of time between the most ancient and most modern portions of the *Mahabharata* could account for its containing, together with a style of fighting more brutal than any to be found in the *Iliad* and *Odyssey*, moral sentiments rivalling the most spiritual utterances of Seneca, Epictetus, and Marcus Aurelius in their resemblance to the doctrines of Christianity. It is therefore almost certain that the original foundation of the whole structure was the narrative describing the gambling, the exile, and the great war, and that writers of subsequent centuries, when civilization had improved morality and introduced intellectual speculation, added numerous philosophical disquisitions to the original epic. It is even thought by some scholars that the striking parallels between the *Mahabharata* and Christianity may be due to late interpolations made after the influence of Christianity and some knowledge of Christian doctrines had permeated to India. But the difficulty of determining even approximately the date of the various portions of the poem is so great, that it seems better to look upon it as one whole representing the state of civilization that prevailed in India during the ages of Greek and Roman history. By surveying it in this light we can at least determine how much brutality prevailed in the most barbarous, which was probably the earliest, epoch of this period, and also, what an advance in moral and metaphysical philosophy had been made before the *Mahabharata* took its present form.

Such metaphysical speculations as occur in the *Bhagavadgita* and elsewhere we have not space to examine. It is easier to confine ourselves to the ethical element in the poem. That Sanskrit moralists had worked out independently the moral conclusions that are often supposed to be the peculiar property of European thinkers, may be clearly seen from an ethical argument given in the third book of the *Mahabharata*. Pratap Chandra Roy, the Secretary of the Datavya Bharata Karyalaya, who is devoting himself to the laborious task of translating the whole *Mahabharata*

literally into English prose, has published already his translation of the first two books and part of the third including this discussion, so that a considerable portion of the *Mahabharata* is now accessible to all the English speaking world. The persons who take part in the dialogue are Yudhishthira, his brother Bhima, and their common wife Draupadi. Yudhishthira had lost in a gambling match with his cousin Duryodhana his kingdom, his own liberty, the liberty of his four brothers, and finally his wife Draupadi. Duryodhana and one of his brothers in the exultation of their triumph submitted Draupadi, whom they claimed as a slave in accordance with the result of their gambling, to terrible insults and indignities. But the father of Duryodhana would not allow Yudhishthira to surrender the kingdom he had lost, and sent him with his brothers and their wife Draupadi back to their capital city. Duryodhana pointed out to his father the impolicy of this concession, and besought that he might at least be allowed to play another gambling match with Yudhishthira, on the understanding that the loser with his brothers should go into exile for thirteen years. This was permitted and Yudhishthira, who lost again, went with his four brothers and Draupadi to spend their years of exile in the forest. Bhima and Draupadi try to persuade Yudhishthira that he ought not to wait the stipulated thirteen years, but take immediate vengeance on their enemies for the indignities they have suffered. But their arguments are answered from a higher level of morality by Yudhishthira, who is intended to be the embodiment of perfect virtue. For Yudishthira was the son of the God of Justice and, as soon as he was born, an incorporeal voice said "This child shall be the best of men—the foremost of those that are virtuous. Endowed with great prowess and truthful in speech, he shall certainly be the ruler of the Earth. Possessed of prowess and honesty of disposition he shall be a famous king known throughout the three worlds." Accordingly, just as the speeches of Christ in *Paradise Regained*, of Æneas in the *Æneid*, and of King Arthur in the *Idylls of the King* may be assumed to represent the opinions of Milton, Virgil, and Tennyson, so the sentiments uttered by Yudhishthira are intended to give expression to the highest moral sentiments of the authors of the *Mahabharata,* while any opinions that he contests are thereby condemned as wrong.

Apart from religious considerations, there are, as Mr. Sidgwick shows in his *Methods of Ethics,* three ultimate reasons which are supposed to justify conduct and show its reasonableness. If a

man is asked why he refuses to make himself wealthy by appropriating trust money, he may reply that such an action would make him liable to punishment, or that it would cause unhappiness both to the person deprived of his property and also to the world generally owing to the feeling of insecurity and mistrust engendered by such acts, or finally that he sees clearly without regard to consequences that it is his duty not to do such an action. The first answer is egoistic, the second utilitarian, and the third may be called intuitional. If a man were always to guide his conduct by considerations of self interest he would be a consistent egoist; if he always aimed at general happiness, he would be a consistent utilitarian; if he always acted in accordance with his intuitions of right and wrong without regarding consequences he would be a consistent intuitionist. As a matter of fact most men waver between these three ultimate reasons, sometimes appealing to one, and sometimes to another, and not recognising the possibility of a conflict, and therefore not seeing any necessity to determine which of the three is superior to the others. We shall see that all three principles are clearly appealed to in the dialogue under consideration, and that Yudhishthira declares in favour of the strictest form of intuitionism as affording the true standard of action.

Draupadi at the commencement of the dialogue which we wish to examine calls upon Yudhishthira not to forgive the Kauravas but to take vengeance upon them. She quotes an old sage, who showed on egoistic principles the evils of continual forgiveness, and also the evils of continually punishing every offence. There is a time for forgiveness and a time for punishment. "He that becometh forgiving at the proper time and harsh and mighty also at the proper time, obtaineth happiness both in this world and the other." She finishes her appeal by urging that the case of the insolent treatment they have received from the Kauravas is not a proper occasion for forgiveness but requires immediate vengeance.

In his first reply to Draupadi, Yudhishthira confines himself for the most part to egoistic and utilitarian considerations. Although these principles are not the sole justification of his conduct, he can quite reasonably employ them as arguments against a person who had argued against forgiveness on egoistic grounds. Thus opposing egoistic arguments by other egoistic arguments he finds a common ground with his antagonist. The reply may be partly regarded as an *argumentum ad hominem,* but it also has a certain amount of absolute force, as egoistic considerations are generally

acknowledged to be reasonable in themselves however inferior in importance to the higher interests with which they may conflict. Yudhishthira first shows how anger leads to all kind of sin. "The angry man committeth sin; the angry man killeth even his preceptors. The angry man insulteth even his superiors in harsh words. The man that is angry faileth to distinguish between what should be said and what should not. There is no act that an angry man may not do, no word that an angry man may not utter. From anger a man may slay one that deserveth not to be slain, and may worship one that deserveth to be slain. The angry man may even send his own soul to the regions of Yama." So far the argument appears to be intuitional since it condemns anger as productive of injustice and other vices. But when Yudhishthira goes on to say that the wise beholding all this control their anger, desirous of obtaining high prosperity both in this and the other world, the ultimate reason furnishing the basis of the argument is seen to be the egoistic principle that it is reasonable for each man to secure his own prosperity, and his remark that truth is more beneficial than untruth, and gentle than cruel behaviour appears from the context to be rather egoistic than utilitarian. At the same time it is apparently recognised by the speaker that either anger or some substitute for anger is necessary to protect the individual against wrong and as a check upon evil doing. The usefulness of resentment has been abundantly shown by Bishop Butler and other moralists. It will be generally allowed that if anger disappeared from the world and nothing took its place, an appalling increase of wickedness would be the result, as evil doers would fear no punishment. Is there then any means by which anger and its evil effects could be banished from the world without its good effects being lost at the same time? Yudhishthira suggests an escape from this difficulty which he seems to have vaguely discerned. He says that "they that are regarded by the learned of foresight, as possessed of (true) force of character, are certainly those who are wrathful in outward show only." This seems to suggest, that, when we suffer wrong, we should not allow ourselves to be driven to rash acts of punishment by gusts of passion, but should appear to be angry and act as if we were angry, in order that the injustice may not be repeated. This is an ingenious suggestion, but it is to be feared that ordinary men without the stimulus of real indignation would not in cold blood take the trouble to punish evil doers. The reply to Draupadi then goes on to take rather a utilitarian character. It

is argued that if wrathful requital became law universal, the continuance of life would be impossible. "If the injured return their injuries, if one chastised by his superiors were to chastise his superiors in return, the consequence would be the destruction of every creature......If the king giveth way to wrath, his subjects soon meet with destruction. Wrath therefore hath for its consequence the destruction and the distress of the people." Thus wrath is condemned as incompatible with the happiness and the continued existence of living creatures. The end of this section of the Vana Parva reverts to egoistic considerations of the state of bliss to be obtained by the forgiving in another world.

Draupadi answers Yudhishthira's egoistic arguments by pointing to the fact that the wicked sometimes flourish while the virtuous are unfortunate. As an instance she gives Yudhishthira himself, who regarded virtue as dearer than life and was nevertheless robbed of his kingdom and driven into exile, while his wicked cousins enjoyed prosperity.

Yudhishthira might have answered her on egoistic grounds by declaring that happiness is by no means entirely to be identified with outward prosperity, and that he in exile under the foliage of the Dwaitavana forest was really happier than Duryodhana in his palace. Whether the poet thought of such a reply or not, he makes Yudhishthira take a different and a higher ground. Kant, the strictest of modern moralists, teaches that no act is really virtuous, unless it is formally virtuous, that is, unless it is done simply from love of duty. If any other motive of natural inclination leads to the action, however much it may outwardly resemble a virtuous action, it is not really virtuous. This very strict criterion of moral action is anticipated in the *Mahabharata* by Yudhishthira who says to Draupadi "I never act solicitous of the fruits of my actions! I give away because it is my duty to give; I sacrifice, because it is my duty to sacrifice! My heart is naturally attracted towards virtue. The man who wisheth to reap the fruits of virtue is a trader in virtue. His nature is mean and he should never be counted among the virtuous," He then goes on further to show that the man who does an act outwardly virtuous from desire of reward not only fails to be virtuous but also loses the reward he expected for his seeming virtue, thus by his folly sacrificing happiness both in this world and the next.

Draupadi's reply is rather incoherent. Indeed she declares herself to be raving. In her previous speech she had advocated

fatalism: in this she insists upon the freedom of the will. She uses one favourite modern argument in support of freedom. "It is" she says "because a person is himself the cause of his work that he is applauded when he achieveth success. So the doer is censured if he faileth. If man were not himself the cause of his acts, how could all this be justified." This argument is strongly stated. It can only be answered by denying entirely the justice of reward and punishment, and saying that reward and punishment though unjust may be reasonably inflicted on grounds of expediency. Thus the freedom of the will is based on the possibility of justice. Draupadi appeals to the freedom of the will as proving that prosperity may be secured by action, and therefore urges her husband to make an energetic attempt to recover his kingdom. Such an argument is of course a very inconclusive reply to Yudhishthira's perfectly disinterested profession of virtue.

The next speaker in the dialogue is Bhima, the most impetuous of the five brothers. "Why" he exclaims "in obedience to the trite merit of sticking to a promise, dost thou suffer such distress, abandoning that wealth which is the source of both virtue and enjoyments......That virtue, which tortureth one's own self and friends, is really no virtue. It is rather a vice producing calamities......He that practiseth virtue for virtue's sake, always suffereth. He can scarcely be called a wise man, for he knoweth not the purposes of virtue, like a blind man incapable of perceiving the solar light." Bhima throughout his speech regards virtue as a means to the attainment of happiness and as being on a par with wealth and pleasure. "One should not devote oneself to virtue alone," he says "nor regard wealth as the highest object of his wishes, nor pleasure, but should ever pursue all three." In conclusion he urges his brother to cultivate the virtues of the warlike caste to which he belongs and recover his kingdom by force of arms. Even sins committed in gaining a kingdom, he adds, can easily be expiated by sacrifices and bountiful gifts to Brahmans. Yudhishthira in reply maintains, that the promise given before the gambling match, that if he lost he would retire with his brothers for thirteen years, was a binding engagement which he could not break for the sake of an earthly kingdom. He ends by saying "I regard virtue as superior to life itself and a blessed state of celestial existence. Kingdom, sons, fame, wealth—all these do not come up to even a sixteenth part of truth."

Bhima once more calls for immediate vengeance passionately

exclaiming that "if a man slaying his injurer, goeth the very day into hell, that hell becometh heaven to him." Then Yudhishthira changes his line of argument, perhaps despairing of exciting in the breasts of his hearers his own disinterested love of virtue, and points out to Bhima the immense difficulties that will have to be overcome if they rashly without much deliberation rush to battle with their enemies.

All through the argument dramatic discrimination of character has been well maintained. Draupadi, like a woman, shifts her ground and is prevented by her strong emotions from rigidly maintaining her line of argument. The hot-headed Bhima gives forcible expression to his comparatively low moral sentiments. Yudhishthira in accordance with his reputation for virtue acknowledges humbly the justice of the reproaches, to which he has subjected himself by his unhappy gambling, but never swerves in his determination to abide by his plighted word, whatever may be the consequences, although at the same time he shows that honesty is really the best policy. Thus it may be concluded that the writer of the *Mahabharata*, or of this part of it while recognising the importance of egoistic and utilitarian considerations to guide others in the way of virtue, had himself adopted a system of intuitionism closely resembling Kant's.

M. MACMILLAN.

SARVAJNA AND HIS POETRY.

Of all the Canarese bards none perhaps is better known to men of all creeds than Sarvajna. He has not, as the author of *Rajashekhara* has, given us brilliant and extravagant descriptions of scenery and a voluptuous diction; he has not popularised the voluminous epics of the *Ramayana* and *Mahabharata*; nor is he probably so often quoted by the Munshis as the more polished author of the *Jaimini*. But the wise saws, the poignant satire and the simple pithy sayings to which Sarvajna's muse gave birth have become immortal on the lips of the Canarese-speaking world.

Of Sarvajna's life, as of many other Indian poets, our knowledge is very limited. Lockharts and Boswells flourish only where the printing press is active and in an age of 'general curiosity and intelligence.' But Sarvajna lived when writing was executed on the palmyra-leaf and poets prospered under the patronage of

some inglorious Mecænas or Bhoja. The following passage, translated from the *Canarese Poetical Anthology*, sums up perhaps all that has yet seen the light concerning the poet's origin, and as to his life we are almost shut up to what can be guessed from his works.—"In the village of Masur, Dharwar, there lived with his wife Mallamma a Brahman of Árádya denomination by name Basavarasa. Having had no offspring they went on a pilgrimage to Benares, prayed to the local god for a male child, and ate the god's *prasād*. On their way back they were overtaken by a storm at Ambulur, where they halted in a potter's house. Here Basavarasa was enamoured of a widow called Mále* and formed an intimacy with her of which our poet was the fruit . . ." The word *Sarvajna* means *the omniscient* and whether this was only a *nom de plume* or the real name by which the poet was known to his mother and neighbours is itself a question which admits of doubt. Sarvajna's authorship can never be mistaken inasmuch as every stanza of his ends with his name. These stanzas are composed in ancient Canarese, and from this fact the Rev. Mr. Würth, the virtual editor of the Anthology, surmises that they may be several hundred years old. Mr. Rice with greater probability fixes their date as late as 1800, A. D.

Almost all the Canarese poets were men of some culture and possessed a fair knowledge of Sanskrit; and Sarvajna was at least not a stranger to that divine tongue. In one stanza he quotes a Sanskrit aphorism in its original form, *viz.*, *Jātasya maranam dhruvam*, *i.e.*, one who is born is sure to die. Although his knowledge did not perhaps extend from the cedar in Lebanon to the hyssop that springeth out of the wall, our poet sings about a variety of subjects—kings and courtiers, Brahmans and Jains, ascetics and society, women and fools, astronomy and astrology; nay, he has even written a book called '*Kálajnána*' in which he 'professes to prophecy.'

To begin with I shall give a few extracts from his astronomical and meteorological writings. The following is the rule laid down for the computation of the hour of the day, the accuracy of which I shall leave my astronomical readers to test:—"Measure your shadow by your feet, double this number and add 11 to it; divide 210 by the number thus obtained and you have the number of *ghaliges*, (a *ghalige*=24′). These *ghaliges* are to be supposed to have elapsed since morning if the observation is made before noon, and to denote the time that has yet to elapse before sunset if the observation is made

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* Mr. L. Rice has 'a Malawa widow.' See his edition of *Bháshá-bhushana*.

after noon." This rule is still observed by many Hindu priests. Amongst the stanzas on weather is this,—

"When the sky is dark as black bees, and the clouds like parrots green,
When the sun doth rise obscured by clouds, the rain is near, I ween.
When the lightning fires the east and when the rainbow marks the west,
When the wind blows from the north, that rain is near, assured rest."

Of course Sarvajna did not discover any physical law but only put into verse the popular notions of his time. In my school-boy days I met some people discussing with an air of serious concern what the plant '*Pundarika*' could be, because Sarvajna in one of the stanzas quoted by them says that the juice of this plant has the power of transmuting copper into gold.

He has also something to say with regard to the climate, the vegetable productions and the people of the different parts of his country. In the north, says he, the towns are scattered and water scanty; the plains are fertile; the western districts are woody and unhealthy, &c. He characterizes the people of the east as envious and slovenly, of the north as skilful but wanting in eloquence, of the west as sickly and irritable, and of the south as lovers of luxury and display. He is very bitter against the Tamulians whom he calls '*tigalaru*.' With regard to this appellation Dr. Caldwell says "The Canarese pundits consulted by Mr. Narasimmiengar explained it as meaning rude. This substantially accords with Mr. Kittel's explanation. Mr. Narasimmiengar adds 'The word *tigalaru* has almost ceased to be one of reproach and there are large communities, some of them Brahmans, called by this name.'" *

The excessively cautious advice given by Sarvajna to courtiers is, every word of it, necessary under a despotic monarchy. Says he,—

"Talk not in a playful manner in the audience of a king,
Nor be the butt of others' jokes, nor trust a man in anything.
Ruin waits for him that makes the minister his enemy,
Or friendship with the Queen enjoys or acts with fools unthinkingly."

The qualifications of a good king are enumerated in—

"Kings that cannot ride on horseback and have not a battle won,
Corpses are they, also such as woman's love have never known."

and in—

"Brothers to the wives of others, terrors to the enemy,
Fearers great of dire sin, such kings secure prosperity."

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* In South Canara, especially at Karkala, we find some people called *tigalaru*, who for all the world look like Tamulians and can at once be distinguished from the indigenous shudras of the district. They are supposed to have followed Tippu as military supporters and this view is corroborated by the fact that they are found only in places where there once stood forts.

Those who know what sort of rulers the Rajahs of former times generally were can readily understand why Sarvajna felt it necessary to include regard to a woman's chastity amongst the positive virtues of a king. Devotedness to the sovereign on the part of a soldier is set forth in the following strong terms.

> "Urge your steps on, heaven awaits you; draw them back, and hell is nigh;
> One step weighs an *Ashwamedha*, and for his king one needs must die."

As might be expected Sarvajna's estimate of women is very low. The fair sex, he holds, is never trustworthy and, therefore, says he,—

> "Feign in your wife to put your trust,
> But really do put none,
> Be to her movements e'er awake,
> Or else you are undone."

Women and goldsmiths are described by poets as objects always to be distrusted. Sarvajna, after asserting that goldsmiths would not scruple to steal while making a crown for Shiva himself, condescends even to mention some of the tricks played by them. Probably he imitates the tone of the Canarese proverb which reads —'The goldsmith makes no exception of his sisters' *i.e.*, he deceives all. Sarvajna's notion of a good wife is embodied in—

> "A wife that doth not loudly talk,
> Nor doth abuse, nor up doth look
> With head uplifted, but is wise,
> Is what God's gift alone supplies."

To these virtues our poet adds contentment—readiness to wear in the ear even a slip of palmyra leaf instead of a jewel. These are indeed highly overstrained notions of modesty and fidelity very much akin to those illustrated in the person and conduct of Chaucer's Grisilda. To do our author justice, however, let it be mentioned that he admits that—

> "Woman's e'er a helping hand, a way to heaven, obliging all;"

but he adds in the same breath—

> "But mind she is a very plague if forth her anger one should call."

When Sir Henry Taylor thinks that the wives of statesmen should not talk of politics (*i.e.* party politics) it is not surprising that Sarvajna should consider, as he does, that conversations on political topics are beyond the sphere of a woman's rights and privileges.

In his notions about women, politics and astrology our author is but the mirror of his times. Not so however in his religious opinions. In fact it is difficult to say what exactly his creed was.

There is not a single popular religion of India which he does not aim his shaft at. The Rev. Mr. Würth and Mr. Rice both put him down as a Lingáyet. Probably they are right. But I may be permitted to point out as a self-evident truth that Sarvajna could hardly have been a Lingáyet when he exclaimed—

"Wretches fleeing for salvation to a stone, behold with scorn,
A Linga huge, found 'neath their feet, they with the sacred twigs adorn."

or when he asked—

"Has Shiva stolen a plate to be
Now shut up close and now set free?"

Sarvajna's birth shut him out from the pale of Brahmanical society. He was no believer in the caste system, which he holds up to the severest ridicule. Pariahs and Mádigas eat the flesh of the black antelope and its skin is used by Brahmans among other purposes to sit upon while taking their food. If a skin thus defiled by Pariahs is used by Brahmans, which of them is superior to the others in point of caste, asks our poet, who did not very much care what stick he took to beat those he disliked. Not content with exposing the inconsistencies of Brahmans he thus points out the unreasonableness of the caste system.—

"Burns the light inside the cottage of a low-caste man the less?
Speak not of low caste, or high; a caste man's he whom God doth bless."

And again,—

"One the earth which all men tread on, one the water all do drink,
One the fire for all which burns; why then so many castes? O, think!
If hunger, thirst and sleep and lust and passion are for all the same,
And birds and beasts and men all feel them, whence do castes derive their name?"

Does this not remind one of Shylock's remonstrance: "Hath not a Jew eyes? Hath not a Jew hands, organs, dimensions, senses, affections, passions? Fed with the same food, hurt with the same weapons, warmed and cooled by the same winter and summer as a Christian is? If you prick us do we not bleed? If you tickle us do we not laugh? If you poison us do we not die?"

In several other stanzas written on the same subject Sarvajna speaks of the human body as an indiscriminate and unclean jumble of bones, nerves, flesh, blood and marrow. In what other light could a man, already pessimistically inclined, view the human frame, when the exquisite structures and the wonderful adaptations that *we* find in that cunningest of nature's works were not dreamt of in his philosophy?

The belief in a plurality of gods finds no favour in his eyes.—

> " Speak not of this god or that god,
> Speak not even of Mahádév ;
> The true god is the god of gods,
> He who his creatures all doth save."

Not one of the Puránic deities escapes his searching criticism. Brahma, he says, is called the creator, but he could not create a head for himself when Shiva relieved him of one. Abhimanyu fell in battle although Arjuna was his father, Indra his grandfather and Krishna his uncle. Of course I do not mean in the least to suggest that these gods cannot clear themselves of the charges of omission and commission brought against them by our mischievous poet. Vishnu, for instance, might say that the preservation of his nephew was not a matter of sufficiently great importance to the world, or that the battle-field in which the poor lad was killed was so very heavily charged with magnetism or electricity that the occult forces at his command could not operate. However cleverly the gods may defend themselves, *there* is Sarvajna's opinion, and we may take it at what it is worth.

If my readers will pardon Sarvajna for the blunt audacity which is a marked feature of his writings, and me for quoting what is necessary to give a faithful idea of his religious sentiments, I shall add that he alludes to the two great epics of the Hindus in the following verse :—

> " Look at those foolish men* who listen,
> With a sense of mystery,
> To tales of rape and tales of murder,
> And deem them sacred history."

European missionaries are sometimes accused of abusing the Hindu gods. Here is a son of India who speaks more strongly than the most outspoken missionary. Truly, a man's foes are those of his own household. It might, however, be said by way of an extenuating remark that the stage of civilization which Sarvajna's age had attained to was a stranger to that delicacy of satirical language which English education has taught us now. Some of those who have not received English education out-Herod Sarvajna even at the present day. A swamy, lately hearing that some of his disciples were helping the widow marriage movement, sent round a

* I substitute these words in the place of the original epithet which I consider too offensive to be given.

bull in which they were pronounced to be eager to enjoy the title of '*runda-kulaka*' which may euphemistically be interpreted as meaning 'widows' sons,' but has really the force of 'whores' sons.' In Europe the case was hardly better a few centuries ago. Luther actually called the Pope a 'big ass,' and this was only one of those rare flowers of rhetoric which the great Reformer so liberally showered on his opponents.

When so much is given of Sarvajna's attitude towards Brahmanism it is hardly necessary to add that he denounced idolatry. Max Müller sympathizing with a 'Hindu of Benares,' quotes the latter gentleman's emphatic protest against 'the sweeping accusation' brought forward by Europeans that the Indian religion is idol-worship. The quotation reads :—"If by idolatry is meant a system of worship which confines our idea of the Deity to a mere image of clay or stone, which prevents our hearts from being expanded and elevated with lofty notions of the attributes of God, if this is what is meant by idolatry, we disclaim idolatry, we abhor idolatry, and deplore the ignorance and uncharitableness of those that charge us with this grovelling system of worship. But if firmly believing, as we do, in the omnipresence of God, we behold by the aid of our imagination, in the form of an image any of those glorious manifestations, ought we to be charged with identifying them with the matter of the image, whilst during those moments of sincere and fervent devotion we do not even think of matter?"* So far our anglicized friend of Benares, who, no doubt, breathed the purer atmosphere of educated society. What has Sarvajna to say, who perhaps knew the religious beliefs and experiences of his countrymen of ordinary intellect better than this learned (I was going to say, sophistical) champion of idolatry? Why did he say

"Th' temple's architrave, and coping of the roof are all but stone;
So are the edges and the corners; blessings come from God alone."

by which, I suppose, Sarvajna meant that the idol could have no more virtue in it than so many parts of the temple. To burn lamps before an idol is to him a mere 'waste of cotton and ghee.' A man must, on the other hand, know the 'eternal secret truth.' About sacred places and rivers he says—

"If frogs and fish in water live
Hallowed can that water be?
That place alone is sacred where
Sacred inmates you can see."

* *Chips from a German Workshop.*

Sarvajna was not certainly a Jain. He somewhere says ironically that it is impossible for Jains to tell a lie. Nor has he any respect for their priests, who lead ascetical lives.

> "When a serpent casts its slough off, does it lose its poison too?
> Nor can one who leaves the world become thereby a *guru* true."

Elsewhere he laughs at the painful practice observed by Jaina priests of plucking out their hairs one by one instead of shaving them off.

Was Sarvajna a Budhist in his heart? He did not ignore the existence of God as the followers of Buddha do. On the contrary, he speaks of Isha or God in many a stanza. Moreover, he seems to have had no belief in the doctrine of transmigration of souls.

> "Why speak of the false belief that men once dead are born again?
> Plants grow from the seeds we scatter; but, once dead, they dead remain."

It seems to me that the above quotations drive us to the conclusion that our author's religion was at one time at least, Theism; *i.e.*, essentially, belief in one God without a second, and in a future state.

The most mystical part of the poet's creed is the importance which he attaches to a *guru*, or priest. "A true *guru* is not to be considered a man like other human beings any more than the tree of paradise is to be regarded as a mere tree, the cow of paradise an ordinary cow, or the philosopher's stone as a mere stone." "The *guru* is a flight of steps leading us up from the pit of life; his mercy destroys our sin as a fire burns up a heap of camphor without even leaving enough of ashes to mark one's forehead with; it is a diamond that can cut up a mountain of sin." &c. By priests, however, the author did not mean ascetics merely :—

> "A head all shaved, a *chandak* stick
> That in the hand is ta'en,
> A wife forsaken, these, without
> True priestly lore are vain."

Again,

> "To grow the hair will only breed
> Lice but no piety."

'A Shiva-yogi when he sees a woman fares like butter before a fire.'

> "Ashes all the body o'er, a red cloth, make no devotee.
> Yogis true are only such as of their passions masters be."

By a *guru*, then, Sarvajna would seem to mean a man in this world but not of it, one who knows the mystery of God and the soul. In a country where, and at a time when, the people in general were plunged in the depths of hero-worship and idolatry, it is but

natural that a transcendent reverence should have been paid to those who possessed an insight into the nature of *Jivátma* and *Paramátma* and could pierce beneath the crust of mythology and superstition.

From what has been already quoted we can see that Sarvajna was essentially a cynic. It is not only the holiness of priests, the honesty of the fair sex, and the justice of kings that this Diogenes attacks but humanity in general.

> "Where in this world are men who, when they see
> A woman, gold, ripe fruits upon a tree,
> Would not in full possession of them be?"

A comparison of this with Byron's—

> "But who can view the ripened rose, nor seek
> To wear it? Who can curiously behold
> The smoothness and the sheen of beauty's cheek
> Nor feel the heart can never all grow old?"

will be instructive in many ways.

Unfortunately some of our author's remarks are but too true. Take this one :—

> "When asked to give a pie as alms
> Men are sore angry made.
> But fines, though e'er so heavy, are
> Without a murmur paid."

Or this :—

> "Let poor men speak sound sense and all to them full scornfully say 'nay';
> Let kings rant, drivel in mouth, and all to them admiringly say 'yea.'"

Sarvajna has versified a few riddles. But they are in no way superior to the numberless frivolities of the kind poured forth by our schoolboys in many a publication now-a-days. I shall not, however, deny my readers a specimen :—

> "Bite and it will bite,
> Nor fire nor scorpion,
> 'Tis nothing wonderful,
> To everybody known." (PEPPER.)

With one more remark I shall conclude this article. I have all along called Sarvajna a poet. But his poetry is by no means of a high order. Saraswati seems to have touched his vocal organs with better effect than his heart, so that jingling numbers escape his lips pretty profusely but it is not often that we discover sparks of the poetic fire in the heap of rhymes which we have inherited from him. What is written on technical subjects like astronomy, alchemy, &c., must necessarily be more or less prosaic. No doubt,

poems have been written in other climes on 'The Sugar-cane,' 'The Cheese,' 'The Botanic Garden,' and such like subjects. But, not to speak of the inferior merits ot these poems, only those aspects of the themes which are susceptible of poetical treatment are dealt with in them. Sarvajna's stanzas on similar subjects, on the other hand, seem to have been written solely and simply for the purpose of conveying information. Here and there we meet with a few round-about expressions and allusions in them. But these conceits cannot mark a number of rhyming lines with the stamp of poetry. To say 'parrot's colour' instead of 'green,' or 'Shiva's direction' instead of 'the north-east' is not real poetry. The stanzas on other than technical subjects, however, are a great deal better in this respect, as the quotations given above may show. We are indeed sometimes struck with the images presented to our mind with a freedom and daring which Sarvajna alone can show, although, it must be confessed, that in many places this boldness of imagination is maintained at the complete sacrifice of elegance of taste. In my opinion, however, Sarvajna has not done very much in the way of 'enriching the blood of the world' by his thoughts, as poets, 'those rare souls,' should, according to Tennyson, do; but he has done good service to us by moulding into neat, terse and easily remembered forms, the wisdom of the many and the wit of the philosophers. Before concluding I shall translate two of his terse and well-turned stanzas, although more than half the beauty of the original is necessarily lost in rendering it into English. Of course the following quotations are not connected with one another in meaning.

"Best is the man who *does* but talks not, middling he that talks and acts;
Worst the wight that talks but never implements his words with facts.
Broken rice is precious as a ruby if 'tis given in need;
Rubies given when not desired are worse than broken rice indeed.
Boots it aught to have a wife and children, or to have amassed
A hundred crores, if therewithal no whit of piety thou hast?
Count the fingers,* spells the tongue, but thinks the mind of other things?
These are what in ruined places are a dog's vain wanderings."

"Sandal sends out perfume still though it be burnt. So we do see
Good men, having knowledge, though they suffer prove still good to be.
Men void of knowledge in this world of seeming fondly roll in pain,
E'en Gods weep when the righteous die. But with the wicked 'tis not so;†

* The beads of the rosary.

†The translation here, as in few other places, is not altogether faithful. Speaking of a certain translation of Ferdusi, Robert Southey remarks that it 'certainly must be unfaithful, for it is in rhyme.' And I must confess that I have not everywhere succeeded in falsifying this observation of Southey's.

Entangled in the snare wherewith deceitful Mayà hath them ta'en.
For when they die men feel as when from off their skin the itch doth go.
He who knows well how to answer let him yield with prudent skill,
Words when made to clash against words bring fate near to work her will.
Sports engage our infancy, and youth is given to wisdom's pride;
Full of griefs old age doth prove; they all unto the grave do guide."

H. NARAYANA RAO.

LETTERS FROM HYDERABAD, V.

The great cost of her army has, as we have seen, been the primary cause of Hyderabad's embarrassments. Had she continued to maintain her native levies only, she would probably have been able to get along in a hap-hazard kind of fashion; but when, in addition to these, she also had to pay from thirty to forty lakhs annually for a small army disciplined according to the European style, it was burning the candle at both ends, and in 1853 she was in consequence on the verge of insolvency. Then came the treaty under which the Berars and the Doab were ceded, and she was relieved from the cost of the Contingent. The vigorous and able administration of Sir Salar Jung introduced system and order into what had been confusion and chaos, and, as I have shown, the province improved from year to year until at last it was in a fair way of prosperity. Then came the mutiny of 1857. Every one knows what the attitude of Hyderabad was during this crisis, and how greatly Sir Salar Jung's loyalty strengthened our hands. In the same way as Sir John Lawrence kept the Punjaub, so did Sir Salar Jung keep the Deccan, in check. When the mutiny had been quelled there arose the question of reward, and it has often been asserted that, as far as Hyderabad was concerned, we were by no means ungrateful. This is what we did. First of all we restored the Raichoor Doab which had been ceded in 1853. This, however, can scarcely be called an act of generosity, because the cession had been made in order to provide for the payment of the Contingent, and it was found that the revenues of the Berars were quite sufficient not only for that purpose but also to leave a large surplus. As is always the case after a cession of this kind in India, the schedules framed on native administration were found greatly to under-estimate the actual revenue, and a systematic survey and settlement soon discovered an immense amount of concealed cultivation. The Doab, therefore, was no longer required for the purpose

for which the treaty of 1853 had been framed, and the restoration of this small province was therefore only an act of justice. Then we forgave the debt of fifty lakhs of rupees, towards the payment of which the surplus revenues of the provinces ceded in 1853 were by treaty to have been devoted. There is certainly an appearance of generosity about this, but it must be borne in mind that, first of all, we had during the seven years of our administration given no accounts, as by treaty we were bound to do, and seeing that in 1860 we admitted that the Doab was not required in order to meet the cost of the Contingent, it is exceedingly probable that for some time before 1860 the revenues of the Doab (about twenty lakhs) had been an actual surplus in our hands, and that, therefore, a large amount of the debt had been wiped out. But this was not all. The Hyderabad State agreed to cede to us certain taluqs lying on the banks of the Godavery which were worth from two to three lakhs of rupees annually, which, capitalized at four per cent. were themselves sufficient to cover the whole debt. One more boon we also granted, and that was the handing over to Hyderabad of the State of Shorapore. Shorapore was a small State tributary to Hyderabad, but during the mutiny the Rajah rebelled, and had to be subdued by our forces. His territories were then forfeited and were held by us. The Nizam being the suzerain of Shorapore, this rebellion may be said to have been as much against his authority as against that of the British. Under any circumstances we got nothing from Shorapore before the mutiny, and as the Nizam was during that time our ally it would have been difficult to find a good reason for retaining land which belonged to his vassal.

When, therefore, we look closely into the details of the rewards for loyalty granted to Hyderabad in 1860, we find that as far as generosity is concerned there is very little to boast about. We gave her back what was her own and nothing more. However this may be, there can be no doubt that the revenues of these restored districts helped Sir Salar Jung very greatly in his measures of reform, and he was also wise enough to continue the system of administration which he found had been introduced by us, and gradually to extend it to other districts. It was in this way that the first steps were taken towards the organization of the Police and of the Department of Public Works.

The foregoing must serve as a slight sketch of the different stages that Hyderabad has passed through up to the time of the

death of Sir Salar Jung, two and a half years ago. There are many more points of interest, but space will not allow me to dwell upon them here. It is now necessary to take a glance at the administration of the present time. First of all comes the Revenue department. This department may be said to be in a very high state of efficiency and, with the exception of some parts of the Telingana districts, it will probably bear comparison with anything that we can show in British territory. I do not say it is perfect, but during my 16 years' revenue experience in our own districts, I also failed to find a perfect revenue administration anywhere, so that this qualification is scarcely a disparagement as far as Hyderabad is concerned. In the Mahratta districts especially, the revenue appears to be promptly and easily collected, and throughout the whole province the collection was last year 97 per cent. of the demand. In the Mahratta districts it was as high as 99 per cent. The average assessment in the Mahratta districts is very reasonable, being about 14 annas for dry, and between four and five rupees for wet land,— a small assessment when the fertility of this part of the Deccan is borne in mind. It is watered by several large rivers, and the soil is exceedingly fertile; artificial irrigation is very seldom needed, and the soil and climate are so good that it pays the ryot better to raise cotton and maize by the help of the rainfall, than to undertake the labour and cost which are inseparable from the cultivation of rice. In the Telingana districts the average assessment is higher, but it must be remembered that no survey has as yet been made of this part of the country, and whenever a survey of two or three villages has been made, it has always been found that the land actually in occupation is about double the extent it is represented to be. In this part of the country there is a great deal of rice cultivation, and there are some splendid irrigation works. The country however is very much under-populated (in one district averaging only about 80 to the square mile) and there are not sufficient cultivators to take up the available land. It was here that in former days the old Hindoo kingdom of Worangal had its capital; it was here that the greatest slaughter took place at the time of the Muhammadan conquest in the 14th century, and for many years subsequently. From this slaughter the country does not appear to have recovered, and a vast amount of land which in former years must have been irrigated now lies waste, or is covered by impenetrable and deadly jungles and forests. There is, however, a future in store for this

portion of the Hyderabad Province; it is here that the extensive coal fields are situated, and there is little doubt that there is, besides, an immense amount of undeveloped mineral wealth. A railway is now being opened out to Worungal, and when this has been completed and joined to the main arteries of India to the north at Nagpore, and to the east at Bezwada in the Madras Presidency, we may reasonably hope for a new era in the history of Hyderabad.

Perhaps the best test of the efficiency of the Revenue Department is the manner in which it has been able to perform some of the extra duties that have devolved upon it. Three of these deserve notice,—the Survey, the Settlement, and the Famine of 1876-77. The survey was commenced eleven years ago and has been supervised and carried out almost entirely by Hyderabad native officials. The executive head was Moulavie Mehdi Ali—at present known as Nawab Muneer Nawaz Jung, the gentleman whose letter regarding the state of Mussalman feeling in India, attracted some attention a few months ago. This officer had been a Deputy Collector in the North-West Provinces, and was brought from there to Hyderabad by Sir Salar Jung. A valuable acquisition he has proved, for during the last ten years he has been the prime mover in every revenue and financial reform that has been carried out. Trained in the system of survey in force in the North West, he was naturally inclined to introduce a similar system into Hyderabad, but before doing so he spent some time in studying the Bombay methods. He soon became convinced that the Bombay plan of survey was better suited to that part of the country, and throwing aside old traditions he set about his new work. He had first to teach himself, and then his subordinates, but he was so successful that when, after three or four years, his work was tested, the errors were found to be far below the margin allowed, and could compare favourably with surveys in our own provinces. In the same way the Settlement followed, and now that nearly half the whole Province has been surveyed and settled, the actual cost per acre amounts to only a very little more than three annas, a figure which is exceedingly reasonable and smaller than what we can shew in many a district of our own territory. The survey and settlement are now thoroughly organized and are placed under one head, Major-General Glassfurd who is at present in England.

The famine of 1876-77 was chiefly felt in the Southern and Western Districts adjoining the Bombay and the Madras Presidencies. There was distress and pressure all over the province, but only

actual famine in these parts. The whole management of the famine shows the excellent organization of the Revenue establishment. As soon as matters began to look dangerous in September 1876, a Central Committee was formed with Mr. Mehdi Ali as Secretary, Special Commissioners were despatched to each part of the province and a systematic plan of action was resolved upon. There seem to have been no divided counsels, as was unfortunately the case in this Presidency, and when at the commencement of 1877 Sir Richard Temple visited Hyderabad as Famine Delegate he was able to report that everything was well in hand. One satisfactory part of the famine management was that all the different departments loyally co-operated with each other, working under the orders of the Central Committee, and some of the work turned out appears to have been exceedingly creditable. By the end of 1877 the actual famine was almost over, and although the Mansion House Committee made an offer to Sir Salar Jung of a portion of the funds at their disposal he generously declined it. To those who are accustomed to the routine and organization of a British district all this may seem to be undeserving of any particular notice, but if we look back for a moment to the state of the province as I have depicted it, when Sir Salar Jung assumed office in 1853, it will be understood how vast were the changes that he had introduced. If a famine had occurred twenty years before the people would have died by thousands, and whatever funds might have been sanctioned for their relief, would have found their way into the pockets of the officials.

The greatest fault to be found with the Revenue Department is that its officials are also invested with judicial powers. In fact, apart from the courts in the capital and the suburbs, there are no independent judicial officers at all. The district Commissioners, Collectors, and Tahsildars, exercise both civil and criminal powers. In our own districts it is bad enough, but there the revenue officials exercise only magisterial powers and there is a separate court in each district for the trial of the more serious criminal offences. In every district the civil cases are under an entirely separate department. Unfortunately at present this evil admits of no remedy. The state funds would not bear the expense of a separate judicial department and the Stamp Act in force is not of a nature to make the courts of law self-supporting, inasmuch as one object of Sir Salar Jung's policy was to make the cost of litigation as small as possible. The result is inevitable. When the returns from litigation are so small that they bear only an infinitesimal propor-

tion to the cost of the law courts, separate courts will not, and cannot, be maintained. I believe that I am correct in saying that during the last year the whole collections under the Stamp Act were not much over two lakhs of rupees. Another blot is that most of the noblemen claim the privilege of being exempted from stamp dues, and the result is that the poor alone pay what little revenue is derived from stamps. Some of the chiefs however, learning a lesson from their own exemption, introduce stamp fees in their own jaghirs, and thus derive a revenue which ought properly to belong to the Government, and which by this means they obtain from the very people it was intended to exempt. This is a subject which requires thorough reform, and a moderate Stamp Act should be introduced, the revenue from which, though perhaps not sufficient to make the courts absolutely self-supporting, should go a long way towards providing for their cost. This having been done, a regular judicial establishment should be introduced throughout the province and should be entirely independent of the Revenue department.

The Department of Public Works is a comparatively new creation having been established for not more than 12 years. It has done much good work, but the funds at its disposal are entirely inadequate to the requirements of the Province. The result is that the proportion of cost of establishment and cost of actual work turned out varies from 25 to 30 per cent., and the total amount expended amounts only to between 13 and 14 lakhs. Out of this expenditure too much is spent in the neighbourhood of the capital, and too little attention is paid to seeing that those persons who benefit from agricultural improvements carried out at Government cost, contribute towards the return which should make such works remunerative. For instance, a large channel has been dug from an irrigation tank some miles distant from the capital, at a cost of more than 20 lakhs. This channel is a good work, and has been well carried out, and the benefit of it is said to be very great. The water brought by the channel is, however, used almost entirely by noblemen and jaghirdars, through whose lands it flows, and they contribute absolutely nothing in return for the benefit which they receive. Now this is unreasonable, and though it might be unfair to expect them to pay for the actual cost of the work, it is only fair that they should pay for the increased benefits which they enjoy. There would be probably no difficulty and no hesitation in making a *ryot* pay a water cess, and there can be no reason why a nobleman, who can better afford to do so, should be exempted.

It would be tedious to enumerate all the different departments, but suffice it to say that they are all being gradually placed on an efficient footing. The Police has been re-organized on the Madras system, there is a regular department for the administration of jails; (though in this respect I hear that in remote stations there is much supervision required,) there is a forest department, (in which again there is room for considerable improvement) and all the other departments necessary for the transaction of the business of a great state. There is, however, one thing which should be borne in mind, *viz.*, that there is always a danger of repeating the mistake of burning the candle at both ends, which led to the embarrassments previous to 1853. Establishments, framed on a European scale, are very costly, and there is no room for the entertainment also of the supernumeraries and hangers-on, so common in native states, who hold nominal appointments and do nothing; and as long as the enormous sum of 60 lakhs per annum is spent on an army in addition to the Contingent and Subsidiary forces, it will be impossible to provide sufficient funds to enable the different departments to carry out the reforms and improvements which are needed.

There are two branches of revenue in which it is probable that considerably more revenue might be realized, *viz.*, the Customs and the Abkary. As regards customs, not only is there reason to believe that *moglœ* tricks are practised, but also here again the nobles enjoy an immunity from taxation, and are allowed to import their articles free. This is bad enough, but there can be no doubt that advantage is often taken of this privilege to import, under the protection of a nobleman's pass, goods destined for other persons, and used for purposes of trade. The privilege of immunity should be done away with. But until this reform can be carried out, a system of drawback should be introduced, under which all goods passing the custom-house should, at the time of passing, pay the prescribed duty; but periodically the privileged individuals should be allowed to claim a refund of the duty paid on production of the receipt. This would do away with the opportunity of smuggling goods for private individuals under the cover of a privileged pass. As regards abkary the old system of farming out the districts is in force. The result is an average consumption per head, throughout the province, of about 4 annas, which is half the average per head consumed in the Berars. There are, however, very great variations in the average amounts consumed per head in the different districts; in some the figures being as much as 6 annas per head, and in others

as low as one anna. This shows that under a proper administration this branch of the revenue could be very considerably improved. Excluding the city of Hyderabad the total revenue from this source is about 28 lakhs of H. S. rupees. If it in any way approached the figures obtained in the Berars, it would amount to very nearly 50 lakhs of Government rupees. It is probable that a properly organized excise system would be found to bring about a great improvement in this branch of the revenue. Here again, however, there is the same difficulty to contend with in the exemption claimed by noblemen and large proprietors, and as long as this is permitted, a large preventive force would be required to prevent smuggling from the numerous scattered estates.

There is, therefore, still a great deal to be done, and though Sir Salar Jung accomplished wonders, he has left enough for his son to carry out, to show that he is worthy of such a father. The present Minister seems to be thoroughly aware that there is work to be done and sets his shoulder honestly to the wheel. His main wish is to do justice and uphold the honour and credit of the State. This has been strikingly shown in the settlement of the claims of the Sultan Nawaz Jung, about which, since the disturbance which took place during the last Mohurram, so much has been said. The claim upon the Government was only an indirect one, the original debt having been incurred by a third party under a promise of the late Minister that he would see that the money was paid. There were other counter claims by the Government and it became tolerably clear that the court appointed to decide upon the matter would give their decision against the Sultan. But the Minister was unwilling that the shadow of a suspicion should rest upon the good faith of the Government, and was especially anxious that any guarantee made by his father, should be conscientiously fulfilled. Accordingly, though there can be little doubt that the Government would have gained the legal decree, terms were offered which amply covered any guarantee for which the Government might possibly have been liable. These terms satisfied the Sultan and were willingly accepted by him. In all his work the present Minister is thoroughly supported by his brother Muneer-ul-Moolk. Of course both being young they have much to learn, but this they are ready to do, and—a rare thing in this world—when they ask for advice they are willing to take it. The great want which they feel is the aid of honest, able and experienced men. Many of the higher officials are persons of ability and integrity,

and any government might be proud of such men as Mehdi Ali, and Seyd Hussein Belgrami, but all of them are not of this stamp. Again, there is a great dearth of well educated natives of the State who are fitted and willing to take subordinate posts, and thus earn the experience needed for the proper fulfilment of the duties of higher ones. This is one of the tasks for the future, and there can be no doubt that the present Government is anxious to offer every facility towards providing the necessary education.

Two or three questions seem to be of more importance than others, and indeed of such vital importance that unless they are properly solved, the State will never be as efficiently administered as it should be.

1. There should be a reduction in the expenditure on the army, not only as regards the regular and irregular forces maintained by the State, but also as regards the jaghir troops. The regular forces should be fixed at a strength sufficient for absolute requirements, and the holders of military fiefs should be made to pay an equivalent for the troops they are no longer required to maintain. Some attention was lately attracted to Mr. Mehdi Ali's letter to the *Bombay Gazette*, which was quoted in the *London Times* and discussed at the same time as another one on the same subject from Sir Lepel Griffin. If some such system as that advocated by Mr. Mehdi Ali were adopted in Hyderabad, the State would have an opportunity of effecting the savings so urgently required, and there can be no doubt that any system which would alter the present one would be of benefit not only to the province but to the empire. At present we have the strange spectacle of a province, in a state of profound peace, in which three large armies are kept up at a cost of about 200 lakhs annually, but of which not a single regiment is available for the purposes of imperial defence. In addition to these forces there is another of irregulars which, instead of adding to the security of the country, is a constant menace to the well being of the Government.

2. The necessity of adopting measures to restore the prosperity of those districts, which, having been depopulated in former years, are now in a wild and comparatively uncivilized state. If measures could be adopted to disband the armed men who are no longer required for purposes of defence, here is an occupation on which they could be well employed. They might literally be made to turn their swords into ploughshares, and to render good service to the State by helping to reclaim the many thousand acres now lying waste.

3. The development of the resources of the country by the extension of railways, so as to tap the almost inexhaustible treasures of the coal fields. This would have the effect of introducing capital, and the prosperity of the people would soon follow.

4. The abolition of the numerous privileges under which the chiefs and nobles claim exemption from taxes and from the authority of the law. Office should be made the reward not of birth but of merit, and we should then hear less of the factions and intrigues of the Hyderabad nobleman, which have earned for the State so bad a name.

These would seem to be some of the obligations which the Hyderabad State has yet to meet; but have we, in our turn, none to fulfil towards her? If, as Lord Ripon said, it is righteousness that justifieth a nation, it would seem that we are bound to regard the cession of the Berars as a temporary act. When once we look upon our occupation of these districts in that light one-half of the difficulty will be got over. As soon as the State is able to pay for the Contingent it has pledged itself to maintain, and is able to provide fitting guarantees for the punctual performance of its pledges, then if treaties are to mean anything we are bound to restore the property which was only pledged to us. It is no doubt a difficult thing to restore territory, but we have already made a partial restoration, and there can therefore be no reason, why, when the time comes, we should not complete what we have begun. The difficulty which such a restoration would entail will make the credit of it all the greater, and when it has been done then may we claim to be "justified by our righteousness."

J. D. B. Gribble.

THE YAJNOPAVITA, OR HINDU SACRED THREAD.

Doubtless to a large section of the readers of this magazine, any attempt to convey information on such a subject as this, will be like the proverbial carrying of coals to Newcastle; still there are others, especially Europeans, to whom a few particulars may be both new and interesting. It is a trite saying that men are apt to be most ignorant on things constantly present to their observation, and this is particularly true with reference

to the every day things connected with Hindu religious and social customs. Probably but few of the Europeans domiciled in India, could give any intelligent account of the reason why, for instance, the Hindu shaves his head, leaving a top-knot most carefully preserved; why he paints those marks on his forehead, or smears his body with those grey ash coloured marks; or, again, for such social customs as perpetual widowhood, or the so great desire for a son that one must be adopted if nature denies the precious boon. And yet there are reasons for all these things, reasons so important and binding upon the orthodox Hindu, that to neglect them is to imperil the safety of his soul.

The same remark applies to the sacred thread so commonly worn by those one daily meets with. Probably few, except the Hindus themselves, could tell why this cord is worn, why certain have it whilst others have it not, or by what section of the community it is worn, or even how or of what it is made; and yet this matter forms a very important factor in the Hindu ceremonial.

Professor Monier Williams, in his work on Hinduism, gives a brief but clear account of the *Upanayana* or investiture with the sacred cord, that may, perhaps, be quoted at length.

"One of the most important Sanskáras is certainly *Upanayana*, induction into the order of a twice-born man by investiture with the sacred cord. This rite is enjoined for a Bráhman in his eighth year, for a Kshatriya in his eleventh, and a Vaiśya in his twelfth, though the time may be extended in each case.

"The sacred cord, which is generally a thin coil of three threads, commonly called *Yajnopavíta*, is worn over the left shoulder, and allowed to hang down diagonally across the body to the right hip. The wearing of it by the three twice-born classes is the mark of their second spiritual birth. There was some difference in the kind of thread worn, according to the class of the wearer, thus:—

"'The sacred cord of a Bráhman must be of cotton so as to be put on over his head in a coil of three threads; that of a Kshatriya, of hemp; that of a Vaisya, of wool.'

"The ceremony of induction begins by the youth's standing opposite the sun, and walking thrice round the fire. The Guru then consecrates the *Yajnopovíta* by repeating the Gáyatrí ten times. Then, girt with the thread, the youth asks alms from the assembled company, to indicate that he undertakes to provide himself and his preceptor with food. The Guru then initiates him into the daily use of the sacred Sávitrí prayer (called Gáyatrí, because it is in the

three-measured Gáyatrí metre), preceeded by three suppressions of breath, the triliteral syllable *Om* and the three Vyáhritis, or mystical words, *Bhúr, Bhuvah, Svar,* and admits him to the privilege of repeating the three Vedas, and of performing other religious rites none of which are allowed before investiture. The Gáyatrí prayer (Rig-veda, iii. 62, 10.) may be thus translated :—

"'Let us meditate (or, we meditate) on that excellent glory of the divine Vivifier. May he enlighten (or stimulate) our understandings.'"

Now although this account is clear, as far as it goes, there are many interesting points it does not explain. We are told here, for instance, that the thread is worn by Bráhmans, Kshatriyas and Vaiśyas ; but, as a matter of fact, it is worn by others besides these privileged castes. The Goldsmiths, for instance, and the weavers, besides certain classes of fishermen and others, wear the thread. Here, then, at the commencement, is a point that needs explanation. The Goldsmith caste, many of whom are carpenters, workers in brass and copper, &c. are themselves a class of Bráhmans, having their own share in the Vedas and their own ritual, hence their privilege in this matter as well as in many others that are peculiar to Bráhmans. The others, as the weavers and fishermen, simply assume this high privilege unlawfully, but, although their custom is not interfered with, no value is set upon it by orthodox Hindus. They cannot, for example, read the Vedas, or even hear them read ; authority to do which, in the case of lawful thread-wearers, is conveyed by the ceremony of investiture (*Upanayana*). In these modern days, some other Sudra classes have adopted the *Yajnopavíta* merely to add to their own importance, but in such cases, it is of no true religious value. An old Sastri was mentioning the other day, that in the Orissa country, a certain Raja of the Sudra caste, makes himself important by assuming authority to invest people of his own caste with the thread. They, to please him, submit to the investiture and adopt the cord—thus adding to the number of unlawful wearers. It is said that one unlucky wight who, on a visit to that country, was presented with this badge of honour, was, on his return home, deprived of the same and well beaten by his indignant neighbours, meeting with something like the fate of the ass who was dressed in the skin of the lion. Professor Monier William says that the Kshatriyas make the cord of hemp, and the Vaisyas of wool. The former are now, practically, an extinct caste, unless we allow the Rajputs their claim to be Kshatriyas, (Parasuráma, one of the incar-

nations of Vishnu, is said to have annihilated the Kshatriyas); as to the Vaiśyas (Banians), whatever their ancient practice may have been, they certainly do not use *wool* in these days. The cord is universally made of cotton. A peculiar kind of very fine cotton is what ought to be employed for this purpose, but, ordinarily, the common cotton is used.

The *Yajnopavíta* consists of several skeins of cotton thread; each thread consists of *three* strands, each skein has *three* threads and a married man's cord must consist of not less than *three* skeins. Thus it will be seen that the number *three* enters very largely into the structure of the cord itself and the ceremony of investiture. This is said to represent the three gods, Brahma, Vishnu and Siva; the three sacrificial fires; the three divisions of time, morn, noon and night; the three worlds, heaven, earth and hell.

The youth when first invested with the thread, being only a bachelor, receives only a single skein, and he cannot wear more than a single skein until he is married, when he must wear at least three skeins, and he may wear five. Usually young men wear three skeins and the elders five. It is not lawful to wear more than five, at least it is not customary. The Bráhman youth must be invested with his cord at about 7 or 8 years of age; he cannot be married until thus invested, but he may, and in fact often does, marry within a day or two of the ceremony. Amongst some of the Banians, it is customary to defer the Upanayana until immediately before marriage; so that if a young man does not marry until he is 20 or 30 years of age, he is not invested with the cord until that time.

A new cord must be put on every year on the occasion of a certain festival. This festival is called *Srávanálapaurnavami*—The full moon in the month of Srávana. (July-August.) Should the cord be broken during the year, a new one must at once be put on. If a man has a cord of five skeins, a broken thread or two does not matter; but a bachelor must have his one skein perfect, without even a single thread being broken, and a married person must have at least three perfect skeins, every thread of which must be perfect and without a knot. There are also certain kinds of defilement, as for instance touching a Pariah, that necessitate putting on a new thread and casting away the old one. Any replacing of the old thread by a new one, must be done with certain ceremonies. Should the cord become broken or any defilement contracted, no food can be eaten until the old one is replaced by a new.

Suppose a Bráhman, in passing through the Bazaar, accidentally

comes in contact with a Pariah, he is ceremonially defiled and must get a new cord. He proceeds home and a cord is sent for,—he cannot touch the new cord himself until he has bathed and thus purified himself from the defilement—after bathing he takes the new cord and dipping it into water, spreads it out on two brass or copper vessels. He then touches the cord with some of the paint he uses for putting the sacred mark on his forehead. After that he walks round the vessels three times, from right to left, repeating the Gayatri prayer quoted above. Then he takes the cord, skein by skein, and puts it on saying the following mantram or consecration prayer, repeating the same for each skein:—

"Yagnópavítam paramam pavitram !
Prajápaterya tsahajam purastát !
Ayushymagrayam pratimuncha shŭbhram !
Yagnōpavītam balamastu tejaha !"

Which may be translated,—

"May the most hallowed Yagnōpavīto, the elder sister of Bráhma author of longevity, the incomparable and the purifier, become my strength and glory."

When he has thus put on the whole of the skeins, he takes off the old cord, repeating a mantram, and rolling it up throws it on the top of the house so that it may not be trodden on and defiled. This completes the reinvestiture, he is ceremonially pure, and can proceed to perform the daily rites which must be gone through before he can partake of food.

The cord, as has been said above, is usually worn over the left shoulder hanging down across the body towards the right; but on occasion of performing the annual ceremony for ancestors, the position is exactly reversed, it being placed over the right shoulder and hanging down on the left side. On certain other occasions it is shifted so as to be worn as a garland round the neck.

It will be thus seen how very important a thing the *Yagnopavíta* is to the Hindu. It is, in fact, an all important thing, being the sign of the second or spiritual birth. Without his cord the Bráhman is not a Bráhman; he is nothing better than an outcaste; he cannot perform any ceremony or partake of any food, nay, he must not even swallow his own spittle; he may breathe, and that is about all he can do until the lost or defiled cord is duly replaced with all proper ceremony.

It may be mentioned in conclusion, that in the case of a Sanyasi, as he has entered the fourth or last stage of the Bráhman's life, the cord is not worn.

J. E. Padfield.

RELIGIOUS FESTIVALS IN GERMANY.

There is probably no other country in the world in which the great church festivals, Christmas, Easter and Whitsuntide are so much made of as in Germany. Christmas indeed is now generally recognized over the whole civilized world as a time of festivity and social mirth, although probably nowhere to such an extent as in Germany, where on Christmas Eve (*Heiligen Abend*) the *Christbaum*, often with its figure of the infant Christ gracing the top, is lighted up in every house, from the palace of the Emperor to the hovel of his meanest subject. To the German Christmas is incomplete without a tree; and for a week before the commencement of the *Fest* the tree-market presents a lively and picturesque appearance. From the beginning of December onwards trees are carted thither by the hundred from the nearest forest, and during the last week a brisk trade is done. The trees vary in price from a few pence to a few shillings according to size and quality; and such utterly wretched ones as would find no purchaser are skifully repaired—holes being bored in the stem into which extra branches are inserted, which are economically cut out of the more branchy trees. One may have everything else—gifts, festivities and mirth, —but without the lighted tree, it is simply "not like Christmas."

Undoubtedly in a greater or less degree the mention of Christmas recalls fond memories and pleasant anticipations the whole world over; but in regard to Easter and Whitsuntide the case is very different. In Presbyterian Scotland, for instance, where the Church does not recognize these days as holy days or festivals at all, one would hardly know that it was Eastertide were it not for the cross-buns exposed for sale in the bakers' windows on Good Friday. There are no general holidays, no extra church services. In Germany the very reverse is the case, and one might almost regard the three great festivals as the culminating points in the social life of the country. For weeks before their arrival they are eagerly looked forward to; as the time approaches the query on every lip is Will the holidays be fine? and woe betide the housewife, who does not make preparations commensurate to the importance of the occasion. The whole house must have an extra cleaning down, every corner must shine, blinds and curtains be fresh for the holidays; and what is equally important an immense quantity of cake must be baked, for, at least on the first and second holidays, no breakfast or afternoon rolls are fetched from the baker's, and home-

made cake must suffice for the needs of the household. The usual cake made is a simple one of which a fair amount can be eaten with enjoyment and without any fear of evil consequences, and it is an ordinary thing for a housewife to bake a quarter of a hundred-weight of flour on such an occasion!

The festivals are church holidays, officially appointed. There are religious services twice a day in all the churches on both the first and second days, and most Germans feel it incumbent on them to go to church once on one of the two days, even though they may not enter the building at any other time during the year—for the German of to-day is not a lover of church-going. But apart from this, one sees nothing of the church festival in the whole celebration. It is a time of feasting and enjoyment, a regular holiday in the modern sense of the word. And the reason for this lies on the surface. The German tradesman and artizan has no Wednesday or Saturday afternoon, no free hour, no summer holiday, often not even the rest and quiet of the Sunday. For the great mass of the people it is work from morning to night, from Sunday to Saturday. With the exception of New-year's-day, the yearly Fast-day (*Busstag*) and the Fast for the Dead (*Todtenfest*,) the great church festivals are the only holidays in the whole year. Hence the intense eagerness with which they are looked forward to, and the very natural wish to make the most of them. From the same reason there is a great tendency among the working and lower classes to carry the matter to excess. Not only the legitimate first and second holiday and the nominal third are spent in leisure and pleasure, but also the greater part of the week. And this is especially the case after Whitsunday, when, during the entire week, and until after the following Sunday—*little* Whitsunday, as it is called,—scarcely one stroke of work is done, and the hardly earned savings of weeks, nay months, are carried to taverns and pleasure booths of all descriptions which are erected for the time in some free place outside the town by the members of the strolling community. Shooting booths, dice booths, carrousels, exhibitions and shows of every variety, barrel organs, drinking taverns, refreshment and confectionary stalls, carts with red herrings, stands where small sausages are supplied warm, vendors of brightly-coloured small balloons—all are there; and the contrast between the misery round the caravans in the quiet morning, and the tawdry finery and din in the afternoon and evening, when the place is literally crowded and all is bustle and life, is a very pitiful one.

I do not mean to say that this fair—for it is nothing else—is visited only by the lower classes. The whole thing is too intimately associated with German life and holiday-keeping for that. The fair is visited by one and all. There is indeed one particular afternoon when the upper ten thousand principally attend, though one can always see a fair sprinkling of respectable burghers on every afternoon. But for the most part these simply pass once or twice up and down. It is the working class for whom it is there, and who make it pay. This fair at Whitsuntide is not universal throughout Germany, though it is certainly very general, occurring principally in those districts where either a *Schützenfest* or a *Kirchweih* is connected with the holidays.

But as a rule the holidays are spent very differently and far more harmlessly by the better classes. During the earlier part of the day the correct German *Hausfrau* is wholly occupied with household cares, which take the form of the preparation of a festive dinner, while the *paterfamilias* drinks his accustomed *Frühschoppen* in his favourite *Stammlocal*, where he has always his own special beer-glass standing. But when the early dinner is over, the real thing commences, and the whole family—father, mother and children—even quite young children with their nurse—set out for one of the pretty gardens which are so numerous in and about all German towns, where the children can play about at their ease, while their elders smoke and work whilst drinking coffee or beer, and listening to the concert which is invariably held in the gardens on such great days. As almost every family turns out, go where you will, you almost invariably meet some acquaintances, even though no previous arrangement has been made. Thus pleasant groups are formed round the tables, and a thoroughly enjoyable, healthful afternoon is spent in the open air under the spreading branches of the linden and chestnut trees. It is early summer, and all nature has its freshest and loveliest dress on; the hedgerows are full of flowers and alive with insect life. The holiday-maker feels as if he cannot drink in enough of the exhilarating freshness all around, and returns home in the evening, tired perhaps, but light-hearted, and with a stock of vigour for coming work and care. These pretty shaded gardens, where any leisure hour, or the sultry summer evenings, can always be spent over one's glass of beer, form one of the pleasant features in German social life.

But there is another point in connection with Easter which deserves notice and which bears directly on the Church celebration of

the feast. We refer to the Confirmation of the young. Every German child is confirmed when fourteen or fifteen years old. This is for the most part neither a matter of conviction, nor of choice. It is looked upon by Germans as a something which must as surely take place at the proper age as, say, the cutting of one's first teeth, or the learning to walk. For two years before confirmation the children attend a class for religious instruction held by the Pastor, so that sufficient time is afforded for a thorough grounding in the doctrines of the Church; but they are for the most part too young to appreciate the importance of the step they are about to take, or to feel the responsibilities which they incur in, thus publicly, uniting themselves to Christ's Church, and fulfilling the pledges made for them at Baptism. Indeed one is saddened by the feeling that this view of the matter seldom comes to the front at all. To the German boy or girl confirmation means a leaving of childhood behind and a stepping out into life; it means a time when one gets rich presents from relatives and friends and becomes for a few days at least a person of primary importance in the house; when the boy, who has no ambition to carry his studies further, leaves school and begins his life's work, may learn to smoke and may occasionally visit the *Wirthshaus*;—when the girl assumes the title of *Fräulein* and begins to come out In Germany confirmation is accompanied by so much that is distractingly enticing to youth that the deeper significance falls almost entirely into the background, and that which should only be a natural and spontaneous result becomes the thing of primary importance. And we cannot think otherwise than that this is one important reason among many others for the present deadness of the evangelical church in Germany. The ceremony of confirmation is in itself simple and pleasing. A fortnight before Easter the children are examined publicly in the church; and on the following Sunday the church is decorated with wreaths of evergreens, and the path of each intending *Confirmant* from his own house door to that of the church is strewn with white sand and green leaves and twigs. The children assemble in the parsonage and, headed by the pastor, form a procession to the church—the girls first, robed in white * and bare headed, then

* The white dress is *comme il faut*, but as the poorer classes cannot afford this, the anomaly is presented in the procession of black and grey dresses, and even occasionally of a brightly coloured one. Dresses and coats are collected throughout the congregation by the pastor's wife for the poor children, so that they may be able to make a respectable appearance in the church, and that the difference between the classes may not be too strikingly apparent.

the boys in black suits with little tail-coats—and seat themselves on either side of the altar. After the ordinary introductory service or reading of the litany, the pastor briefly addresses the children and congregation, a few questions are asked, a hymn is sung, and the confession of faith repeated by all with one voice. Then the pastor calls the children up by name in groups of twos or threes, reads the Bible verse which is inscribed on the confirmation certificate of each, and laying his hand on their heads as they kneel before him, he blesses them in the name of the Father, the Son and the Holy Ghost. Then having shaken hands with each child they return to their former places. Such is the confirmation service from which the children—children in name no longer—return home to receive the congratulations and gifts of their friends, and forget, in the bustle and festivities of the celebration, the impression which may have been made by the solemn service. The Sacrament is taken on Good Friday, when the girls are dressed in black, like all intending communicants in Germany.

In connection with the confirmation many curious customs still prevail in remote parts of the country. For instance in many districts the boys get their new suits made at once full size, so that they may be able to wear them years later at their marriage. One can easily fancy the figures cut by the poor lads in the great blue coats with huge silver or brass buttons, the coat arms and trowser legs far too long for the wearer. But the inconvenience at first experienced is amply made up for by the fact that such a coat serves a lifetime!

Another custom which gives rise to much that is grotesque is that of collecting money among the children to give the pastor who has taught and confirmed them a present. This practice is universal and often becomes a burden to the poorer classes, whilst regarded by the pastor as quite his due. And not only must the pastor have a present, the *cantor*—a person of only secondary importance in a German congregation—claims one too, and indeed often looks sharply after his supposed rights to make sure that he really gets as much as the Herr Pastor. Indeed instances have been known when he or his good wife have coolly laid aside for themselves articles that had been assigned to the pastor and given over to their care until the time of presentation, simply remarking that the pastor's people were not requiring *that*, and they could make good use of it themselves! In the country places, where little money is collected while at the same time the *Bauern* wish to make

a great show with their presents, deputations of the young people come to town, inspect the shop windows, and generally scour the whole place looking for bargains. For if anyone can drive a hard bargain it is the German peasant, who thinks nothing of squabbling half-an-hour over five *Pfennige,* and at the end of that time, after having almost driven every-one on the premises to distraction, leaving the shop without making any purchase at all if he has not got the required reduction. Worst of all in this respect are the Polish peasants who come west in great numbers in spring for the field work, and who, as a rule, offer less than one-half the value of anything they wish to buy. Thus a whole afternoon is spent going from shop to shop, in the purchase of one or two trifles. And the children are naturally just the same. They cannot resolve to spend their whole money on one article, and thus have it good, and they cannot get good things at half their price; so they generally end by buying an incongruous selection of all sorts of articles, such as oranges, cheese-plates, bells and the like; and these they pile up on the altar on confirmation Sunday—a heap at one end for the pastor, at the other end for the cantor; and when the service is over gather them up in their arms and carry them to their respective destinations.

ALICE S. THIELE.

VIRIDITAS EST VIMINIS.

A translation of Burns' "Green grow the rashes, O!"

Nil nisi cura undique,
Semper nil nisi cura;
Quid, nisi essent feminae,
Prodesset vita dura?
Viriditas est viminis,
Viriditas est viminis,
Sed hora mi dulcissima
Acta est cum feminis.

Saepe avari homines
Opes frustra capessunt;
Cum autem tandem ceperint
Haud eis perfrui possunt.
Viriditas est viminis, *etc.*

At mi sit vespere quies
Te, cara, amplexanti,
Opes avarique pessum
Eant, me haud curanti.
Viriditas est viminis, *etc.*

Qui haec derides tristior,
Es plane amentissimus;
Amabat care feminas
Mortalium sapientissimus.
Viriditas est viminis, *etc.*

Natura mater dejerat,
Opus praeclarum feminas;
Rudis nam fecit dominos,
Perita fecit dominas.
Viriditas est viminis, *etc.*

C. COOPER.

LITERARY NOTICES.

Physical Arithmetic; by A. MACFARLANE, M.A., D. SC., F.R.S.E. London: Macmillan and Co., 1885.

This book, as the author says in his preface, may be described as a treatise on applied arithmetic, the applications being chiefly in physical science. A chapter is devoted to financial arithmetic, and the rest of the work treats of the definitions and relations of physical units and of the solution of numerical problems in physics.

The method adopted throughout the work is a somewhat novel one, but so far as we can judge it is not likely soon to supplant the method in use at present. It is called the equivalence method and has been adopted by the author on account of his dissatisfaction with the unitary method now so commonly used. We quite agree with him as to the imperfections of this system, but we think the proportion method much superior both to it and the method adopted by the author. The end of a good method in arithmetic in our opinion is to obtain the answer to any given question by processes easily understood, rational, neat and involving as little liability to error as possible. The unitary method satisfies the first two conditions but is clumsy and long. The equivalence method, at least as given in the work under review, appears to us to

satisfy none of these conditions. If it be objected to the proportion method that it is too mechanical, we would say that the use of a rule of any kind is to save continual reference to first principles. The rule for proportion can be explained once for all, and perhaps the clearest explanation of it can be given by the unitary method. We have certainly no hesitation in saying that the old method is as yet the quickest, neatest and most accurate of the three.

For the benefit of those who are not acquainted with the equivalence method we give an example from those worked out. The question is :—

"If by selling at 7*s.* 6*d.* per yard you lose 10 per cent. on the outlay, what do you gain or lose per cent. when you sell at 8*s.* 6*d.* per yard ?

Solution :—

$$x \text{ pence cost} = \text{yard}$$
$$90 \text{ pence receipt} = \text{yard}$$
$$\therefore \frac{x-90}{x} \text{ pence lost} = \text{penny cost}$$
$$\text{Now } \frac{10}{100} \text{ pence loss} = \text{penny cost}$$
$$\therefore \frac{x-90}{x} = \frac{1}{10}$$

By solving this equation we get $x=100$

$$\therefore 100 \text{ pence cost} = \text{yard}$$
$$\text{Again } 102 \text{ pence receipt} = \text{yard}$$
$$\therefore \frac{102-100}{100} \text{ pence profit} = \text{penny cost.}$$

i. e., 2 pence profit = 100 pence cost
i. e., 2 per cent. profit on outlay."

We prefer to state it thus :—

$$90d. : 90d. :: 102d. : 102d.$$

i. e., if by selling at 7*s.* 6*d.* you get 90 pence for what cost 100 pence, by selling at 8*s.* 6*d.* you get 102 pence for what cost 100 pence, *i. e.*, you gain 2 per cent. on the outlay.

We strongly deprecate the use of the sign = to denote equivalence as seen in the above example. It is difficult to tell sometimes whether it connects two members of an equivalence or of an equation. The sign ≡ has wisely been introduced to denote identity, and we do not think it would have been much of an innovation in a book like the present to have used a separate sign to denote equivalence.

In some parts of the work we notice a tendency to use terms to express ideas when there is really no need for such terms. Thus nothing appears to be gained in clearness of expression by saying that the *resistance* which the reaping of a field offers to a man is *p.* hours = field of grain, but the meaning of resistance is rendered considerably more ambiguous. The same remark applies to *facility* of working which is said to be the reciprocal of resistance. For these and similar reasons we cannot recommend the section on financial arithmetic as a guide to the study of the subject.

In the remainder of the book the fundamental units in the different branches of physics are defined, and their relations discussed. With regard to the definitions the author has evidently consulted the best authorities, and this department of the work is accurate and up to date. Special attention is called to the difference between *speed* and *velocity*, the former having only magnitude, the latter also involving the idea of direction and being therefore represented by a vector. *Force* is defined as the rate of *impulse* with respect to *time*, while by *impulse* is meant the cause which produces a change of *momentum* in a body whether the change takes place in the magnitude, or in the direction, or in both the magnitude and the direction. This is the form of statement given to the relations between force, impulse and momentum by Clerk Maxwell in his *Matter and Motion*. To the section on electrical resistance is appended a table shewing side by side the dimensions of electrostatic and electromagnetic units. In connection with the subject matter of every section several examples are given worked out at full length, but even in the matter of units, to deal with which the equivalence method is supposed to be specially adapted, we do not admit its success. The solutions given are generally long and clumsy, and although to the author they may seem quite clear we do not think they are likely to be easily intelligible to those to whom a good general method in dealing with physical units is most necessary. We subjoin an example relating to change of length in a rod :—

" When a straight rod is changed in length uniformly the rate of expansion (L being the unit of length) is expressed by—

a L increment per L original length ; (1)

and the ratio of the expansion is expressed by

$(1+a)$ L expanded length per L original length ; (2)

The reciprocal of (2) is

$\frac{1}{1+a}$ L original length per L expanded length ; (3)

and the rate of diminution is

$\left(1-\frac{1}{1+a}\right)$ L decrement per L expanded length ; (4)

i. e., $\frac{a}{1+a}$ L decrement per L expanded length.

When a is a small quantity, $1-a$ is a sufficient approximation for $\frac{1}{1+a}$ (by a former article), and then (3) becomes $(1-a)$ L contracted length per L original length ;

and (4) becomes

a L decrement per L original length."

Several tables are given containing the values of a great many physical constants, and each section contains a large number of examples to

be worked out by the student. These will be found very useful by those who are studying experimental physics.

The subject deserves much more attention than it has hitherto received and there was ample room for such a book as the present; but we may say in the author's words that we think the resistance of the field has not been much diminished.

The Properties of Matter, by P. G. TAIT, M.A., SEC. R.S.E. Edinburgh: Adam and Charles Black. 1885. Price seven shillings and sixpence.

This is another of the series of admirable text books of which we have already noticed two volumes, "Light" and "Heat." Like the former volumes it claims only to be an elementary treatise written for the ordinary student, but like them it contains much which all students will find to be of the greatest use and highly suggestive, leading them on to study more deeply the subjects which are only lightly touched on here, but touched by the hand of a master who emphasizes the important points and does not crowd the work with details, which in a book, as in a picture more often mark the patient plodder than the man of genius. Details, of course, are not neglected where they are required to illustrate any particular feature, but they are so chosen that they do not, as is too often the case, withdraw attention from the far more important principles.

The term "Properties of Matter" is somewhat indefinite, but tradition has associated the name with such subjects as mass, weight, cohesion and elasticity, which are conveniently studied by themselves as a preliminary to the study of the more definite subjects of light, heat, sound, electricity and magnetism. The plan of the book is that which has been so successfully adopted in the author's lectures in the Edinburgh University and presupposes on the part of the student only such a knowledge of mathematics as every one who has passed the F. A. examination *ought* to possess. He is also supposed to have a general acquaintance with the fundamental principles of *Kinematics of a Point* and *Kinetics of a Particle* such as may be obtained from the study of the simpler parts of the first two chapters of Thompson and Tait's *Elements of Natural Philosophy* or from Clerk Maxwell's *Matter and Motion*. The first chapter is introductory and treats at some length of what we may call the author's advanced views on the subject of Force. He admits that for the sake of brevity we must often use the word Force, but he adds,

"As it does not denote either matter or energy, it is not a term for anything objective. The idea it is meant to express is suggested to us by the muscular sense just as the ideas of brightness, noise, smell, or pain, are suggested by

other senses—though they do not correspond directly to anything which exists outside us."

Only those who have had to teach Natural Philosophy can have any idea of the difficulty which is often experienced in getting students to understand clearly the difference between Force and Energy, while the questions put to the teacher often illustrate, in a painfully vivid way, the mischief caused by the loose manner in which these words are used in many books which are within the reach of the students. The third chapter treats of some of the terms in common use as applied to matter, such as *massive*, *heavy*, *viscous*, *malleable* and *transparent*, and thus gradually leads the reader up from the popular use of such terms to a more accurate knowledge of what is really involved in them. Chapter IV, on Time and Space, is particularly deserving of close study on the part of the young student, who after mastering it should find his ideas on these subjects very much more definite than they were before. The introduction of the *hodograph* and the explanation of *contour lines* and the principles of the graphical representation of experimental results adds greatly to its practical value. Passing over the treatment of the laws of motion and of gravitation in Chapters VI and VII we come in Chapters VIII to XI to what is probably, on the whole, the most valuable part of the book,—the very important subjects of Deformability and Elasticity. These subjects are treated in a very unsatisfactory way in almost all text-books, and though, no doubt, they are of more than ordinary difficulty, they are far too important to be either omitted or passed over hurriedly. We cannot go into details regarding Professor Tait's treatment of them, but must content ourselves with remarking that it is everywhere characterized by a precision of expression which is painfully wanting in the writings of those who have not studied the subject mathematically. As we read these chapters we feel that the writer has such a complete mastery of the subject that he can hardly tell what will and what will not be found difficult by the student. The temptation to exceed the limits which he has set himself seems at times to be almost too strong to resist, but suddenly checking himself with a strong effort he leaves the crooked bye-paths and returns—not without a sigh—to the straight, but much less interesting, road. In the chapter on the compression of gases long quotations are given from Boyle's account of his experiments on the "Spring and Weight of Air" published in 1662 which prove conclusively that Boyle had discovered and published his well known law many years before Mariotte, whose name is so often connected with it, wrote his book on the subject. This question is entered into more in detail in an appendix in which a quotation is given from the *Principia* in which Newton writes sarcastically about Mariotte in connection with this matter.

The subject of the compression of liquids, to a knowledge of which Professor Tait has himself contributed much by his recent researches, is

very fully dealt with. The chapter on Cohesion and Capillarity and that on Diffusion, Osmose, Transpiration, &c., deserve special mention, for we do not know of any English text-book in which these subjects are treated in a satisfactory way. The explanation of the capillary rise or depression of a liquid given in most text books has always seemed to us deficient not only in clearness, but in accuracy, but here we have the whole matter explained in a few sentences and with great lucidity. In addition to the appendix which we have already mentioned there is one by Profeesor Fhut, D.D. on "Hypothesis as to the constitution of matter," another contains a large extract from Clerk-Maxwell's valuable article *Atom* in the ninth edition of the *Encyclopædia Britannica*, while a third gives, in the original latin Vetruvius's account of Archimedes' experiment with the votive crown made for Hiero of Syracuse.

The paper and printing of the book are all that could possibly be desired, but we should be glad to see more illustrations in future editions. All students will be glad to see that Professor Tait intimates that it is his intention to complete the series of text books by similar volumes on *Dynamics*, *Sound* and *Electricity*. We join with Lord Rayleigh in expressing a wish "that the appearance of these may be delayed no longer than is absolutely necessary."

Geological Sketch of the Country between the Singareni Coal-Field and Hyderabad, and *Notes on the Country between the Singareni Coal-Field and the Kistna River,* by R. BRUCE FOOTE, F. G. S., Deputy Superintendent, Geological Survey of India. With maps. From the Records, Geological Survey of India, vol xviii, pt. 1., 1885.

When the proposed immediate opening up of the Singareni coal-fields was under the consideration of the government of India Mr. Bruce Foote was deputed to examine the country lying between Singareni and Hyderabad towards the West, and Bezwada towards the south. The immediate object of the survey was to determine whether there were any outliers of the Barakar rocks,—the Indian carboniferous series—in which further deposits of coal might be found, as any such outliers would influence the choice of a route for the line connecting the coal-fields with Bezwada, and Hyderabad with Warangal. The survey of the country between the Singareni coal-field and Hyderabad dispelled all hope of finding coal there, for the whole of the area was found to consist of bands of granitoid gneiss overlaid only by the local alluvia of the small rivers traversing the country, or by unimportant sabäerial deposits of a recent date. The gneiss is in many parts intersected by trap-dykes several of which are of a large size. Some of the varieties of gneiss are remarked on for their beauty, especially one found 12 miles east of Secunderabad in the bed of a stream between Gutkassara and Auvunumpett, which is a

deep red and green epidote gneiss. The country between Singareni and the Kistna is far more interesting. The greater part of this area also is covered with gneissic rocks but these are in several places overlaid by rocks of the Kadapa series. The gneiss itself consists of two great bands of granitoid rock divided towards the south by a much narrower band of schistose rock. The eastern band of granitoid rock forms the picturesque Condapilly hills and the broad plain stretching from the foot of these hills past Juzzur (Joodjoor). It seems probable that this band is overlapped by the eastward extension of the schistose beds, just as it is believed the southern boundary is overlapped by similar beds in the Nellore district. Beds of magnetic iron ore are found in various parts of the schistose area and, in parts, the ore is fairly rich. One large and important bed of magnetic iron some three miles long comes to within about half a mile of the coal-fields. Of this bed Mr. Bruce Foote justly remarks :

"The ore in these beds is very rich in quality and really appears to have been placed here by nature, in order that an iron Industry might arise as soon as the coal measures close by are made to yield up their carbonaceous treasures. As the line of rail coming from Bezwada could with the greatest ease be carried close along the foot of these ridges, every facility exists for bringing the ore and fuel together at some handy spot, while the great limestone beds of Kadapa age, which occur at no great distance to the east and west of the coal-field would furnish an inexhaustible supply of flux for the smelting works."

There is abundance of excellent iron ore in various parts of the Madras Presidency but nowhere except at Singareni is it accompanied by the supply of fuel which alone can make it valuable. If private enterprize would take up the work of opening out the coal-fields and iron mines it would certainly be well for government to make as liberal arrangements as possible, but if no private company will do the work it seems clear enough that it is the duty of government to do it for itself.

Parks and Playgrounds for the People ; by the Rev. JAMES JOHNSTON, F.S.S. London : Hamilton Adams and Co. 1885.

The energy and eloquence which inspired and guided the "Council on Education in India" during the two or three years of its active existence and enabled it to accomplish so much good work have now been turned into another equally beneficent and necessary channel. Mr. Johnston pleaded long and earnestly for a more generous extension of Educational privileges in India and a more liberal interpretation of the Despatch of 1884, and the agitation which he commenced and sustained through the Council of Education has been crowned with complete success. He now pleads with equal earnestness, and we trust it will be

with equal success, for an increase of the opportunities for physical recreation and training possessed by the youth of the middle classes in our great English cities. Though this new agitation has no direct application to India, the subject is one of universal interest and importance.

The need for such an agitation is no doubt great. The unprecedently rapid growth of some of our English cities, notably London, and the cupidity of those who own land in the suburbs, make it absolutely necessary that Government should take speedy steps to preserve some vacant spaces from the encroachments of the builder. True, much has been done by the Act of 1845 and subsequent similar measures to arrest the enclosure of that ancient birthright of the poor "common lands," and what is now chiefly required is an Act limiting rigidly the rights of freeholders to cover their property with buildings. "Next to religious culture" says our author, "England owes to her sports and pastimes that moral as well as physical powers which has been the secret of her political pre-eminence." This is undoubtedly true. What therefore asks Mr. Johnston is to become of "our manhood," if we go on "rearing houses of brick and mortar on the old commons and wastes of England, on which our fathers trained a vigorous race, endowed with the virtues of hardihood and courage ?"

To enforce his contention by explaining the operation of the present laws, Mr. Johnston adduces an "illustrative case." Norwood, a suburb of London lying due south of the city and at a distance of about six miles, was long famous for its wild and beautiful oak forests. Until comparatively recently it was thoroughly rural. "The present inhabitants of the place remember its shady woods, and dwell with fragrant recollections on the happy days spent in its glades and wastes, no man questioning their liberty to wander at will." Now all this is changed. The estate belongs to the Ecclesiastical Commissioners, and as population has increased the woods have been felled and the whole forest either built over or laid out for building purposes. There is now in Norwood a population of 12,000 without a single acre of ground for recreation purposes. Application was recently made to the Ecclesiastical Commissioners for a plot of land—the only plot left uncovered with buildings—to be laid out for a public recreation ground. The request was certainly not unreasonable, seeing that those who made it pay to the Ecclesiastical Commission a rental of £8,000 for ground which would not have let for £400 a few years ago, and that the Commissioners have a tolerably sure prospect of acquiring, through the lapsing of leases during the next 90 years, house property on the land to the value of £750,000, bringing in a yearly rental of £40,000. The request was refused, the Ecclesiastical Commission did "not feel at liberty to entertain the request for a gratuitous grant" of the piece of land sought but "would be prepared to consider favourably" any proposal for

its purchase at—as it afterwards appeared—a price of not less than £1,000 an acre!

The applicants therefore now raise a larger issue:—

"Knowing that our case is only one among thousands we desire to raise the question as one of great national importance, calling upon the country to awaken to a sense of the danger which threatens it by the use to which these enclosure acts are applied—a purpose entirely alien to that for which they were granted. . . .

"We address ourselves to the people and Parliament of England. That a suburb of London consisting now of 12,000 souls, soon to be increased to two or three times the number, should *for all time* be deprived of even a little bit of ground for healthful recreation, is a thought too unreasonable to be entertained; and yet there are many towns and suburbs growing up throughout England in a worse case than ours; not only without ground for recreation, but deprived of the free air and light of heaven."

The remainder of the pamphlet is an exposition of the present law affecting the subject and a discussion of possible remedies. Into this we need not enter. But we most heartily wish Mr. Johnston and his co-workers (amongst whom are Lord Brabazon and Professor Bryce) the utmost success that they desire.

A Reply to Agnosticism, by the Rev. WILLIAM BELL, M.A., Baptist Mission, Bombay. Bombay: Tract and Book Society. 1885.

This little tract forms No. 12 of the excellent series of "Papers for thoughtful Readers" now in course of publication by the Bombay Tract Society. It cannot be said to contain much that is new or striking—we can hardly look for anything really new on this subject—but it sets the Christian argument against Agnosticism in a clear light and is written in a lucid and forcible style. In his introduction Mr. Bell points out that Agnosticism is at least as dogmatic as Christianity, and that it contradicts "the experience of the race." When from the statement that God is unknown it proceeds to describe Him as the *unknowable* it becomes indeed much more dogmatic than Christianity, and is utterly irreconcileable with the commonest human instincts. Taking then the universal admissions of Agnostics as to the character and moral teaching of Christ, Mr. Bell goes on to show how that teaching is inseparably interwoven with the thought of God, and how Christ's authority as a Moral Teacher vanishes if God be the unknown.

"But it may be asked, does this method of reasoning meet Agnosticism on its own ground? Perhaps not. But that is not the crucial test of the value of such a method. The Agnostic says that God cannot be known. It would be a great deal fairer to those who differ from him if he were to say that God cannot be known by any method of his. The Christian religion does profess to furnish men with the knowledge of God; what we are contending for is that

its method is a perfectly reasonable one, and not to be despised because other methods fail. It discloses to us one whom we recognize as of our kindred—a fellow-man. It draws from us the admission of His moral superiority as evidenced by His moral teaching. We are introduced to Him as He talks of that human nature which we all possess, but which we understood and valued so little till He taught us its worth and its wants; and as He speaks, our consciences confess Him a teacher of Truths. Then we are bidden follow him into a region of things where he speaks as confidently, and to a teachable heart as convincingly, a region of more awful and majestic realities, but which our eyes were unable to see until He revealed them. Is this method not a rational one?"

What is Hindu Religion? By R. RAGHUNATH RAO, Dewan Bahadur. Bangalore: The Karnatic Press, 1885.

Mr. Raghunath Rao begins by avowing himself an orthodox Hindu and giving a brief sketch of the cosmology which such a person is bound to accept:—

"The first created being was Bramha, His life time is one of the cycles or sessions of the Almighty. His life extends over a hundred of *his* years. In one of *his* days fourteen empires rise and fall. The period of the continuance of each empire is called a *manwantara*. At the end of each *manwantara*, annihilation of the world takes place; but one warrior, seven Rishis, and the seeds are saved from destruction. To this warrior and the seven Rishis God communicates the statute law, or the Vedas, and the customary law, or the Smrities. As soon as a *manwantara* commences these laws are promulgated by the Sovereign in Council. These become binding upon his subjects during his reign, (*i.e.*) to the end of the *manwantara*."

Those who believe in the Vedas are, Mr. Raghunath Rao assures us, bound to accept this as correct. In spite, however, of this truly orthodox beginning, he becomes sensible (and we fear heterodox) further on, where he teaches that Hinduism is monotheistic, that God is the sole object of worship, that religion includes morality, that a Brahmin is only deserving of respect according to his knowledge, and that where birth alone gives a title to respect morality must inevitably decline. Whether this is Hinduism or not—a question we leave others to decide—it is at least sound and wholesome teaching, and therefore we fear Mr. Raghunatha will find it unpopular.

The Hindu Reformer, a Monthly Journal edited by M. BUTCHIAH PANTULU. Nos. 1 and 2. Madras: American Press.

This new magazine (which with the exception of a couple of pages in No. 2 is unfortunately printed entirely in Telugu) may be described as the organ of the Madras Branch of the Brahmo Somaj. It is part of an attempt to revive the Somaj and overcome the difficulties to which

we referred with regret two months ago. We are glad to learn that the new magazine has already done something both to set the funds of the Somaj right and to increase the interest taken in its work. The well known single-mindedness and earnest spirituality of the editor is a sufficient guarantee that the *Hindu Reformer* will always be on the side of what is "pure and lovely and of good report," and we wish it a still larger measure of success.

NOTES AND EXTRACTS.

The Young Man appeared last month in a new dress. The proprietors have, it appears, established a printing press of their own, and the first issue under these new conditions is certainly creditable. The responsible managers and editors of the periodical are a small company of young men (members of the Brahmo Somaj, we believe) who, we are informed, "will not grudge either health or the dollar to extend its usefulness." Their object is apparently not so much to advocate the claims of any particular section of society as to reach and influence the young men of all classes, and promote in them a lofty morality and unselfish public spirit. This is a noble aim, and so far the matter of the magazine has not belied it. The articles are of a high moral tone, honest and earnest. We trust that the acquisition of a press is a sign of prosperity, and that in its new form the magazine will be still more popular.

In reply to a question from the Government of Bombay on the subject of State interference in the matter of infant marriage Mr. Shantaram Narayan, one of the ablest pleaders in the Bombay High Court, has replied as follows:—

"I am humbly an advocate of legislative interference in the matter of infant marriage. All civilized Governments have dealt with the question of marriage—of the mutual relations between men and women—as one of which the State has a right and is bound to take cognizance. For instance in Germany the marriageable age fixed by law for men is 18 and for women 14; in Belgium 18 and 15; in Spain 14 and 12; in France 18 and 15; in Greece 14 and 12; in Portugal 14 and 12; in Russia 18 and 16; in Saxony 18 and 16; in Switzerland 14 and 12; in Austria 14 and 14 respectively. Even in India it has been from the ancient times a recognised principle for the law-giver to fix the marriageable limit of age for both men and women, and Dewan Bahadur Raghunath Rao, one of our best Sanskrit scholars and leading social reformers, has shown that according to the shastras infant marriages, as they now prevail, are not legal, and that they are of modern growth.

"Then, again the State is bound to protect the rights and interests of minors, as the *parens patriæ*. Looking upon the question in this light, I do not see

why the Government not being an indigenous but an exotic one, would be departing from the principle of religious or social neutrality, to which it had wedded itself in the administration of our country. But have not Government abolished Suttee, legalised the re-marriage of widows, made laws for the management of religious endowments, fixed the age of majority by means of the Indian Marriage Act, rendered the Shesha ceremony penal and punishable under the Indian Penal Code? It seems to me that it is too late to employ the argument based on the principle of religious neutrality, for it is an argument which was employed before and none the less discarded. In India we look to Government for protection of almost every kind; and we ask it to direct us in most matters. Why should it not lead us also in matters which, though social have an economic effect? Some people argue as if the State or Sirkar has not yet interfered with our social customs. What do we witness every day in our courts of justice? We have a Hindu Law, it is true, but is not that law involved in confusion, and is it not a fact that our courts are expounding it as best they can and bringing into vogue, in effect, new adaptions which Hindu Lawyers of a bye-gone age would have probably stared at? The whole administration of the Hindu Law is, in fact, based upon a legal fiction, and it affords a signal example of the fact that our customs are already being regulated by judiciary interference of a sort; and to the Hindu people, such interference is as effective as legislative interference for the Sirkar whether sitting in the majesty of justice, or the Sirkar proclaiming laws from the throne is to the Hindu alike paternal, and may be held equally liable to be complained against as meddlesome. Those therefore, who think that there is no state interference now with our religious practices or social customs are either not aware of the real State of things or are ignoring it.

"I, therefore respectfully submit that it is the duty of the State, and the State alone, to fix a reasonable standard of age for marriage. The question is as much political as it is social. All civilized Governments have so regarded it, and whoever knows anything of Hindu Society may rest assured that it will not move in the matter unless the lead is taken by the State. The nation, I believe is degenerating in a palpable degree, and since it is not capable of helping itself, it is the duty of the State to send us help from without."

The Executive Committee of the Sadharan Brahmo Samaj, says the Indian Messenger, has lately taken an important step towards furthering the religious education of Brahmo children and young persons. A "Theological Instruction" committee has been formed, consisting of the following gentleman; Pandit Sivanath Sastri, Babus Umeshchandra Datta, B.A., Herambachandra Maitra, M.A., Sasibhushan Basu and Sitanath Datta, with the last mentioned gentleman as secretary; and it has been resolved that—

"(1) An examination in the principles of theistic theology, both doctrinal and practical, shall be held every year, probably shortly before the Maghotsab festival, in which any Brahmo boy or girl, young man or lady may appear.

"(2) The examiners will be divided into three classes, and the standard for each of these classes will be as follows :—

First Class.

I. Doctrinal :—
  (1) *The Roots of Faith* by Babu Sitanath Datta.
  (2) Flint's *Theism.*
  (3) *Dhurmatatwa Dipika*, by Babu Bajnarain Bose.

II. Practical :——
  (1) *Brahmo Dharmer Byakhyan.*
  (2) Miss Cobbe's *Religious Duties.*

Second Class.

I. Doctrinal :—
  (1) *Dharmajijnasa* by Babu Nagendranath Chatterji.
  (2) *Brahmo Dharmer Mato Bisvas.*
  (3) Some of the lectures of Pandit Sivanath Sastri at the Student's Service (not yet selected).

II. Practical :—
  (1) *Sadhan Bindu* by Babu Sitanath Datta.
  (2) *Dharma Sodhan.*
  (3) *Brahma Dharmer Byakhyan.*

Third Class.

I. Doctrinal :—
  (1) *Dharmashiksha.*
  (2) *Chintakanika.*
  (3) *Brahmo Dharmer Matasar.*

II. Practical :—
  (1) *Brahmo Dharmer Anusthan.*
  (2) *Upasana Pranali or Prarthana Mala.*

"(3) The examination will be held in Calcutta and elsewhere if necessary. Question papers will be sent anywhere, on application, if the examination can he held under trustworthy guards.

"(4) Prizes will be awarded to successful students. The Prize Distribution will be held most probably at the time of the Maghotsab festival."

To help in carrying out these resolutions, two additional classes have been opened in connection with the Theological Institution which was already in existence. The first, second and third standards are being taught respectively in the three classes of this institution, the teachers being Pandit Sivanath Sastri, Babu Herambachandra Maitra and Sitanath Datta in charge of the first class; Babus Sitanath Datta and Sasibhushan Basu of the second, and Babu Umapada Ray of the third. A Theological Institution for ladies is in contemplation and will probably be opened after the Puja holidays.

The National Indian Association, which has already done much to benefit Indian youths studying in England, is now prepared to undertake the superintendence of such youths, providing them with suitable homes and

giving them all necessary guidance and instruction for life and study in England. In a quiet way this work has been done for a good many years, and many a Hindu gentleman now practising as a doctor or barrister in India has fragrant recollections of the unfailing kindness and sympathy of Miss Manning and her co-workers. We publish with pleasure the present scheme of the Association.

"1. The object of the scheme is to afford counsel and assistance to Indian Students coming to England, and to provide for them a system of friendly supervision, under which, it is believed, many evils to which they are at present exposed may be avoided, and many advantages placed within their reach.

"2. With regard to age, the Committee are prepared to undertake the care and superintendence of Indian youths from—and in special cases below—the age of 14 years. It is not their wish to encourage parents to send their sons to England so young as to forget their home associations; but those who desire for their sons a thorough English education, or intend them to compete at Examinations for the public service, should send them before they have completed their fifteenth year.

"3. To ensure constant and effective supervision, the Committee have appointed Mr. Algernon Brown, M.A., of the University of Oxford, Barrister-at-Law, who has lately visited India, and has had successful experience in the training of Indian youths, to be Superintendent of students committed to their care, and he will, unless otherwise specially provided, carry into effect all arrangements for their welfare under the general counsel and direction of the Committee.

"4. Tutors, schools, colleges, places of abode, will be selected with strict regard to individual requirements and in careful view of the student's future. It is not proposed to establish a general boarding house.

"5. In the selection of a student's profession or calling for life, the Committee will always be guided in the first place, by the wishes of his parent or guardian; in the absence of any expressed desire, it is recommended that the student should follow the advice of the Committee in coming to this important determination.

"6. The Committee particularly desire their arrangements to include abundant opportunities for enabling each student to obtain an intimate knowledge of the best side of English home-life and manners.

"7. In addition to providing facilities for general, professional, and technical education, the Committee deem it important to promote, when practicable, some acquaintance with the manafactures of this country, especially such industries as are suitable to India, *e. g.* the making of woollen and cotton fabrics, paper, cultery, pottery and porcelain.

"8. The Committee are prepared to arrange to give the students the benefit of English or European travel if it is desired; but this will, of course, involve additional expenditure.

"9. With regard to expenses for an ordinary school education, including board and residence, dress, vacation expenses and cost of superintendence, the minimum sum is estimated at £200 a year.

"For professional, University, and technical training a larger amount is of

course necessary, which will be settled in each case according to the course of study decided on.

"10. Fixed yearly or half-year prepayments of the annual sum agreed upon are strictly required.

SCIENCE JOTTINGS.

From the Report on the Greenwich Observatory presented to the Board of Visitors we learn that for the 12 months ending May 20th, 1885, 431 photographs of the sun were taken on 173 days. On only two of these days was the sun found to be free from spots. During 1884 Greenwich photographs were available for 152 days and the Indian photographs filled up the gaps on 159 days. The mean spotted area in 1884 was found to be slightly less than in 1883 and slightly greater than in 1882, while the faculæ in 1884 showed a slight increase as compared with 1883 and a slight falling off as compared with 1882. It is supposed that the maximum of both sunspots and faculæ occurred about the end of 1883 or the beginning of 1884.

The famous volcano Cotopaxi in Ecuador has again been in a state of violent activity. The eruptions began on July 23rd and a hundred houses in Chimbo, near the mountain, were destroyed by streams of lava and showers of stones and ashes. At Guayaquil 130 miles from Cotopati the eruption sounded like continuous discharges of very heavy artillery which made the ground shake and rattled the doors and windows. The last great eruption of Cotopaxi, on June 26th, 1877, began by an explosion which sent a column of very fine dust up to an enormous height where it rapidly spread out and formed a dark screen, throwing the regions below into complete darkness. At Quito, 33 miles distant, it became so dark in the afternoon that a hand placed before the eyes could not be seen. At Guayaquil the dust shower continued till July 1st. It was from this same volcano that a 200 ton block of stone is said to have been projected to a distance of nine miles!

The attempt to arrest the progress of the dunes in the *landes* of Gascony seems at length to have met with complete success. These dunes or sand hills covered an area of some 85,000 hectares and were in some places 80 metres high and 5 to 6 kilometres wide. In the latter half of last century they were moving inland destroying fields and villages and burying churches even up to their spires. In 1780 steps were taken to fix them by planting them with trees, and though the

work was a difficult one it proved quite successful, and the old moving dunes have been changed into a fixed forest. But new dunes were thrown up between the old ones and the sea and it was necessary to stop this. This was accomplished by forming an artificial dune above high water mark in which the form of the natural dune is just reversed. In the natural dune the slope on the side towards the sea is very gentle while it is steep on the other side, so that the sand grains are blown up the gently sloping side and fall over the top. The object sought for in the new dune was to get a shape such that the sand could not be blown up. For this purpose a row of wooden stakes was erected along the shore about 130 yards from the sea. The sand blowing up against this was partly stopped and partly passed through the spaces between the stakes forming a bank, steep towards the sea and gently sloping towards the land. When the bank reached the top of the posts these were drawn up and the growth continued, the face towards the sea getting steeper while the other face was a very gentle slope. The bank has now an average height of about 13 yards and the advance of the sand is completely stopped. On the landward slope the sand is fixed by planting *arundo arenaria* the roots of which penetrate sometimes as much as 16 feet and greatly help in consolidating the mass. The success of these operations should have a special interest in South India where the *teris* of Tinnevelly and South Travancore resemble the moving sand dunes of Gascony.

At the recent meeting of the French Association at Grenoble there was a long discussion on the subject of the existence of man during the Tertiary period. Objects found in the Lower Tertiary at Thenay, and in the Upper Tertiary at Otta, in Portugal and at Puy Courney in Cantal proved, it was maintained, the existence at that time of animals in Europe that knew the use of fire and were able, more or less, to cut stone. After the discussion the almost unanimous opinion was expressed "that after this meeting and discussion at Grenoble there can no longer be a doubt of the existence in the Tertiary period of an ancestral form of man!"

The conclusions arrived at by the Trinity House Committee on Lighthouse illuminants* are as follows :—

1. The electric light is the most penetrative of the three luminaries in all conditions of the atmosphere, fog included. It, however, is more costly than either gas or oil, and its dazzling effect in clear weather renders it unsuitable for general adoption round the coast.

2. The gas and oil lights are practically equal but the latter system is considerably cheaper, and is simpler and more convenient than the former. The committee therefore recommend that for the ordinary necessities of lighthouse illumination mineral oil is the most suitable and economical illuminant,

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* See vol. II, p. 319.

and that for salient headlands, important landfalls, and places where a very powerful light is required, electricity offers the greatest advantages.

A new theory on the origin of atmospheric electricty has been brought forward by Professor L. Sohncke. It is based on experiments made first by Faraday, and is, briefly, to the effect that if we have two air currents one containing ice particles, the other water particles flowing against each other, then the ice particles become positively and the water particles negatively electrified. Such a mixture of ice and water particles must frequently take place and it is quite possible that this may be the origin of the original charge on the water particles. The acceptance of this theory, so far as we can see, need not lead to the rejection of the condensation theory but rather to the strengthening of it, inasmuch as it shows a possible way of accounting for the initial charge.

An interesting paper was recently read before the Ceylon branch of the Royal Asiatic Society by Mr. A. M. Ferguson, on Plumbago, with special reference to the Ceylon trade in this mineral. Plumbago is found in several parts of the island and much of it is of a very high quality and occurs in large comparatively pure masses. One fine mass, for instance, weighing about 7 cwt. is to be sent home for exhibition in the Ceylon Court of the Colonial Exhibition. The existence of Plumbago in Ceylon was certainly known about the middle of the 17th century but the export of the mineral does not seem to have begun till between 1820 and 1830. During the half century from 1834 to 1884, 3,526,000 cwt. were exported valued at 2,57,42,000 Rupees. The highest recorded price ever got for Ceylon Plumbago is £48 per ton which is a very small fraction of the £3,000 per ton which is said to have been at one time the value of the black lead from the Borrowdale mines in Cumberland. These mines in the 16th and 17th century used to yield an annual revenue of £40,000 though worked for only a few weeks each year. They are now practically exhausted, though a considerable stock of the black lead is said to be still in the possession of the Keswick Pencil Company who use it for making the finest class of pencils. Mr. Ferguson says that Ceylon seems to have as much a natural monopoly of Plumbago in the form most valuable for the manufacture of metal melting crucibles as she has of first-class cinnamon in the vegetable kingdom, but we fear he has overlooked the existence of the "Eureka Black-Lead Mine" at Sonora in California. There the Plumbago occurs in a layer from twenty to thirty feet thick and so pure that it can be obtained in large blocks. From this mine not less than one million kilogrammes was raised each month in 1868.* Large quantities of graphite are used for

* See Chemical News 1868, p. 299.

making crucibles and as a lubricant for heavy machinery, while a by no means unimportant quantity of the finer kinds is used for the manufacture of black-lead pencils. The annual production of these for the whole world Mr. Ferguson estimates at not less than one hundred millions, worth £ 1,500,000.

The fifty-fifth annual meeting of the British Association for the advancement of science was opened in Aberdeen on the 9th ultimo. The opening address was delivered by the President the Rt. Hon. Sir Lyon Playfair, K.C.B., F.R.S., in the Music Hall, before an audience of more than 2,500 persons. The subject of the address was the relations of science to the public weal. In speaking of science and secondary education the President pointed out how insufficient was the time devoted to science in our secondary schools. Taking the most recent returns on those schools in England it is found that in most of them from 12 to 16 hours a week are devoted to classics while only from 2 to 3 are given to science, while in Scotland matters are in a still worse position. He quoted with apparent approval Prof. Huxley's opinion that of the 40 hours a week devoted to public and private study ten should be given to modern languages and history, eight to arithmetic and mathematics, six to science and two to geography, leaving fourteen hours to the dead languages. At present the boy who chooses the "modern side" in a school is placed at a decided disadvantage if he goes in for any of the great national competitions such as the Indian Civil Service Examination. There, for instance, 800 marks as a maximum are assigned to Latin, 600 to Greek, 500 to Chemistry and 300 to each of the other Physical Sciences. When we come to the results of the examinations we find a still greater difference which probably points to defective science teaching, for while 68 per cent. of the maximum was given to Latin and Greek only 45 per cent. was accorded to candidates in chemistry, and 30 per cent. to the other physical sciences. England still holds a very high position as a manufacturing country, but in some departments where a high order of technical training is required she has lost the lead, and in others she is hard pressed by foreign countries.

Turning next to the relation between Science and the Universities, Prof. Playfair pointed out the difference between the sums spent on Universities by the English Government and Continental Governments. The Universities and Colleges of Ireland get about £30,000 per annum and a like grant is distributed amongst the four Universities of Scotland, while a single German University like Strasburg or Leipsic gets £40,000 per annum. Again grants have been given for the new buildings in connection with the Glasgow and Edinburgh Universities, but on a scale very small compared to the £711,000

recently spent out of Imperial funds on rebuilding Strasburg University. France, too, is now making great efforts to improve the position of her Universities, and since the war has spent £3,280,000 on rebuilding her provincial colleges, and spends annually about half a million on their support, and some £30,000 on scholarships. Holland with a population of four millions and a revenue of only nine million pounds spends £136,000 on her four Universities. Fortunately however in England we have the great endowed Universities of Cambridge and Oxford, and in both Scotland and England private liberality has done much to supplement amounts drawn from the national treasury. The old Universities are developing so as to suit the needs of the age and new colleges are springing up in the great centres.

In speaking of the connection between science and industry the President illustrated his remarks by many interesting classical and historical references showing the gradual progress that had been made through the application of scientific discovery to practical purposes. Let us take one of his examples, that of lucifer matches. Up to 1833 when a light was required it had to be obtained by the use of a flint and steel, tinder, and a sulphur match. In that year matches made with phosphorus were first introduced but they were costly, dangerously inflammable, and very poisonous to the makers. The discovery of red phosphorus in 1845 led to the invention of safety matches, which are safe not only for the user but also for those engaged in the manufacture, a fact too often forgotten by people in this country who use the abominable "sulphur matches" and so render themselves indirectly responsible for the poisoning of the many victims of this trade. Prof. Playfair makes a calculation to show the actual money value of the invention of matches, with the result that, reckoning the value of the time spent in procuring a light at only 1*s.* 6*d.* a day, the saving in Great Britain is £26,000,000 annually, a somewhat startling result. Probably this estimate is far too high, but even if we take a tenth part of it the amount is still surprisingly great.

There are many persons who, while quite willing to recognize the benefits of applied science, cannot, or rather will not, see that any good can come from abstract science. Such people will get no sympathy from Sir Lyon Playfair who concluded his address thus :—

Abstract discovery in science is, then, the true foundation upon which the superstructure of modern civilization is built ; and the man who would take part in it should study science, and, if he can, advance it for its own sake and not for its applications. Ignorance may walk in the path lighted by advancing knowledge, but she is unable to follow when science passes her, for, like the foolish virgin, she has no oil in her lamp. An established truth in science is like an atom in matter—something so fixed in the order of things that it has

become independent of further dangers in the struggle for existence. The sum of such truths forms the intellectual treasure which descends to each generation in hereditary succession. Though the discoverer of a new truth is a benefactor to humanity, he can give little to futurity in comparison with the wealth of knowledge which he inherited from the past. We, in our generation, should appreciate and use our great possessions—

" For me your tributary stores combine,
Creation's heir, the world, the world, is mine "

C. M. S.

RECENT PERIODICAL LITERATURE.

The first article in the *Fortnightly Review*, " Catholic Italy and the Temporal Power," will be read with great interest by all who have followed the fortunes of Italy and the Papacy during the last fifteen years, for it contains much that will be new even to the best informed. The writer, Mr. W. H. Hurlbert, was a personal friend of both Diomede Pantaleoni and Count Mamiani, and much of the interest of the paper is due to the sympathy of the writer with the aims and aspirations of the first named of these patriots. Senator Pantaleoni was the coadjutor of Count Cavour, in conjunction with whom he made long and almost successful efforts to bring about the peaceful cession of the temporal power to Catholic Italy as early as 1860. Had they accomplished their object the fierce opposition between the Vatican and the Quirinal would have been avoided, and the Pope would have been spared the humiliation which the Lanza Ministry caused him in 1870. The forcible policy then adopted put the Head of the Catholic Church into a position which Leo XIII still bemoans as "inconsistent with his liberty and independence." In addition to knowledge gained by a long and sympathetic study of Italian questions, and personal contact with men of all parties Mr. Hurlbert draws much of the information which enriches his paper from two books written by Pantaleoni and published shortly before his death—*L'Idea Italiana nella Soppressione del Poteri Temporal dei Papi*, (1884), and *L'Ultimo Tentativo del Cavour per La Liberazione di Roma, nel 1861.* (1885).

The second article—" Ralph Waldo Emerson," is one of those sparkling essays for which Mr. W. L. Courtney is becoming famous. It is a good specimen of that keen psychological and literary analysis which is so fashionable now-a-days, and which seeks to explain every power, artistic or spritual, as the product of heredity and environment. In his closing paragraph Mr. Courtney thus contrasts Emerson with Carlyle :—

"Emerson's fame will probably be independent of any single contribution to the world's literature. For his merit does not appear to consist either in his rhetoric, or his philosophy, or his poetry, but rather in the genial spirit of the man, and in the generous and wholesome influence which he diffuses around him, like some bracing and exhilarating atmosphere. In a different sense from that of the sermon or the ethical homily, it "does one good" to read him; for he braces the sinews and sets the blood coursing more freely through the veins. In this respect he stands at the opposite pole to Carlyle, who supplies the malodorous and distasteful medicine, while Emerson gives the tonic of blithe air and happy sunshine. His spirits are so unfailing, his mental attitude is so sane and manlike, that he cannot even bear that one should mention his maladies, lest he become a querulous valetudinarian. "I beseech you by all angels to hold your peace and not pollute the morning, to which all the housemates bring serene and pleasant thoughts by corruption and groans. Come out of the azure. Love the day." The distemper known as "blue devils" did not apparently haunt

Emerson. "All my hurts my garden spade can heal," he says; albeit that his son, when he saw him digging, is reported to have told him to beware lest he should "dig his leg." There remains, however, a certain desultoriness which will probably prevent Emerson's work from becoming anything more than inspiring and suggestive. Perhaps this is the inevitable accompaniment of one who embraces a transcendental creed, like the shadow which lies across the valley even of him who talks on the heights. Perhaps it is the especial drawback of the modern American mind, which seems to rejoice in impressions and effects and symphonies as though they were the same as honest and full-blooded work. So Emerson himself thought when he asserted that the true dignity of the scholar was not realised in America. "The mark of American merit in painting, in sculpture, in poetry, in fiction, in eloquence seems to be a certain grace without grandeur, and itself not new but derivative; a vase of fair outline, but empty, which whoso sees may fill with what wit and character is in him, but which does not, like the charged cloud, overflow with terrible beauty and emit lightnings on all beholders." The grace of Emerson no one can deny, though even this is inferior to the literary finish and elegance of Hawthorne; but that he was not new but derivative, let his spiritual examplars testify, who were Plato and Coleridge, Swedenborg and Wordsworth."

A third article—"Industrial and Commercial Spain," by George Higgin, is very pleasant reading, for it is a clear and concise account of the immense—in some respects almost unparalleled—growth of 'awakened Spain,' and shows that it is not at all impossible that Spain—barren and underpopulated though she has been for a couple of centuries at least—may some day regain her old glory and rank as a first class power in Europe. Mr. Higgin dates "the great forward movement" from 1862, and traces it chiefly to the growth of intercourse by the development of the railway system. "From 1848 to 1858 some 500 miles of railway had been constructed, from 1858 to 1868 some 2,800 miles were opened, and those 2,800 miles of railway brought the revolution of 1868, and caused the upheaval which cracked the hard crust and gave play to the energies of a people." These railways have been constructed almost entirely with foreign money, for with the bulk of Spaniards "the old custom still continues of burying their gold under the hearthstone until sufficient has accumulated to allow of its being employed in the purchase of a plot of land." But foreign money is easily got by a system of bonds which we venture to think is unique. Nominal 500 franc bonds are issued at a price of 250 francs. These bear interest at the rate of 3 per cent., and a certain number of them are repayable every year at the full value of 500 francs. The bonds to be thus repaid are determined by lot. There is thus a gambling element about them which makes them peculiarly popular in France, where, we are told, there is hardly a respectable waiter to be found who does not own one or more such shares.

The growth in Railways is however only one among many indications of changed conditions. Increases even more remarkable have occurred in foreign and domestic trade and manufacturing and mining industry.

"Compared with other countries, Spain is yet lamentably behindhand, and the figures we have given as representing her trade and commerce appear miserably small for a nation that three-hundred years ago was the principal figure in European history. But Spain of 1883 must not be judged by comparison with Spain of 1583, but with the awakened Spain of 1862, and judged by this light the advance made by the country is sufficiently remarkable, and the advance goes on with an accelerated velocity that every mile of railway opened up tends to increase. With the development of her industrial resources, and they are many and great, the era of "pronunciamentos" and revolutions will disappear; as a matter of fact they are disappearing fast. The attempts lately made to continue the old game have been looked upon with cold contempt by the country generally, and it is only in the magnified reports of English newspapers that they look at all formidable. The Spain of 1883 does not want revolution, it is beginning to find out that no good end is served by such proceedings; that, in fact, they affect too dangerously their own money interests; and the industrial classes are discovering that in such cases it is they in the long run who have to pay the piper, and that it is at their expense the political notabilities of the age climb up to their positions. I think the appreciation of this

fact is extending rapidly amongst all classes in Spain and I look forward with confidence to a continued and rapid increase, in the commercial development of the country, and to a corresponding diminution in the frequency of political changes."

In the *Contemporary Review* for September Dr. W. H. Russell goes to the root of all the misfortunes of Egypt during the past five years in an attempt to answer the question, Why did we depose Ismail? "Can you tell me why we deposed Ismail? Since I returned from the Cape I have been asking every one I thought likely to know. I have read every word relating to our policy that appears in the Parliamentary papers and reports, but I have been unable to find one valid reason for our action." So wrote Sir Bartle Frere four years ago. And any one who will now take the trouble to read the 10,000 pages or so of Parliamentary papers and reports which have seen the light since that time will still be inclined to ask the same question, for the only conceivable reply—We were acting, under pressure from France and with the support of Germany, in the fancied (but not the real) interests of the Bondholders—is, and always has been, strenuously denied by the English government. Dr. Russell may perhaps be rather inclined from a chivalrous pity to look at the bright side only of Ismail's administration, but there is no doubt much truth,—more than it is always comfortable to admit—in the following:—

"Up to 1879 Ismail was recognized by the world as one of the most energetic rulers who ever presided over a State. Under the impulsion of Ismail's powerful hand the teeming projects of his brain were pressed forward to execution instantly and at all costs. Ideas seized on the moment were at once clothed with action. It was as though the Khedive thought he had obtained possession of the talisman of yore, of the genii in the Arabian nights; but he very speedily found himself in the presence and power of the Afreet. The gravest charge that could be made against him was that he had forced the running and had sought to condense into a few years the reforms which ought to have been spread over a period of many years, if not of generations. That offence was one which Prince Bismarck might well have pardoned, for it was one to which he confessed his own proneness . . . . .

"The policy and purpose of Ismail's life, as a ruler were to render Egypt, as far as he could secure the support of the Powers, independent of the Porte; to secure for his dynasty the advantages which are associated with the law of primogeniture in lieu of the Mahomedan law of succession; to establish and maintain order, to develop industry; to promote agriculture; to abolish the slave trade; to lay the foundations of constitutional government by the creation of a Chamber of Representatives; to reform the administration of justice; to educate the people; to bring Egypt under the influence of European civilization; and to assimilate as far as possible his own position and functions with those of a European monarch ruling with and by a body of responsible Ministers The most inveterate and interested of his enemies and detractors, among whom are to be found in the foremost ranks men who have built up their enormous fortunes on his ruin, must admit that in the contrast between the Egypt of 1862 and Egypt of 1879 is to be found the best monument that could be reared to commemorate the achievements of his reign; as a comparison between the Egypt of 1879 and the Egypt of 1885 would afford, the most striking and distressing commentary on the disasters which followed his deposition."

In a useless appeal to the Sultan for protection against the pressure brought to bear upon him by England and France, Ismail thus sums up the results of his sixteen years administration, in words which, says Dr. Russell, will bear repeating:—

"Under my administration Egypt has been covered with a net work of railways. I have largely extended the canalization which fecundates the soil, and have quintupled its productions. I have created two great ports at Alexandria and Suez. I have destroyed in Central Africa the sources of slavery, and have raised the standard of the empire in regions where it was hitherto unknown. I have finished and handed over to the world the canal of the two seas; and, finally, after long and vigorous resistance, I have inaugurated the judicial reforms which, in putting an end to delays resulting from the multiplicity of foreign tribunals, and in administering justice with the promptitude which alone gives it value, have pre-

pared for the future the means of harmonizing the civilization of the east with that of the west."

Why then was Ismail deposed? The question may well be asked, and of one thing we may rest assured—the verdict of history will not be formulated in the language of the Queen's speech at the prorogation of Parliament in August 1879. That such a change was rendered necessary by Ismail's mis-government, that England and France interfered with the purest motives 'to prevent anarchy and misrule'—such statements will not bear the sifting to which history must put them. There can be no doubt that European intervention was purely in the interest of bondholders —chiefly English and French. Ismail had no doubt been spending money lavishly. A country may be burdened even by 'reproductive' works. He himself believed that under the new conditions, and with the increased revenue that such works would ultimately yield, the country would be able easily to discharge the liabilities he contracted for it. And many able financiers agreed with him. But the bondholders were nervous and claimed protection. This was one—and probably the chief—reason for intervention. Another undoubtedly was Ismail's independence. He would not bow to the dictation of foreign States, and greatly to the chagrin of England he deposed Mr. Rivers Wilson. The 'Almighty Chancellor' was irritated in his turn, and England and Germany acting in concert after trying in vain to persuade Ismail to abdicate, induced the Sultan to depose him. From this—as Dr. Russell calls it—"violent, passionate measure" have sprung—

"Envy, hatred, and all uncharitableness: strife, war and intense hatred to European influence; a weak discredited protectorate living under a blank death-warrant with the date of execution not yet filled in."

Another exceedingly interesting Article is on "Rural administration in Prussia" by Professor Rudolf Gneist. The recent "Apocalypse of Evil" is dealt with by Mrs. Fawcett and Miss Ellice Hopkins. Mr. Marvin provides (what is sorely needed!) "A short plain policy for Afghanistan;" and the Bishop of Carlisle gives us some philosophical "Thoughts on Life" suggested by Spencer and Drummond.

The *Nineteenth Century* has no articles of very great interest this month. Earl Cowper discusses the very difficult problem, "What is a Moderate Liberal to do?" but he leaves it very much where he found it. "The Cholera Inoculation Fallacy" by Mr. E. F. Willoughby is a powerful attack upon Dr. Ferrán and his supporters, but much of its strength is wasted through an imperfect comprehension of the exact position of the school it opposes. Nobody denies that a wider induction is needed, and with the exception of Dr. Ferrán and one or two of his most enthusiastic disciples judgment is held in suspense.

To us the most interesting article is that on 'Thibet' by Mr. Charles H. Lepper, which is full of information on a comparatively unknown subject—the habits and customs, hopes and aspirations, government and policy of the Thibetans. Mr. Lepper evidently expects great changes in Thibet in the next few years, both from the wide-spread aspirations of the people and the influence of China and India.

"The Darjeeling railway, and the intercourse it permits by allowing Thibetans to visit India, is already making a stir in public opinion in Thibet. It is encouraging comparisons between British rule, with its justice and freedom from official pilfering and tyranny on the one hand, and the unhappy conditions ruling in Thibet on the other, where the people are looted by both 'Lamas' and officials to the last point of endurance.

Following the above superstitious belief and its consequences, we may as well here mention four prophecies concerning Thibet, current there, and instructive in their way.

1st.—There is a prophecy to the effect that the Thibetan religion will be replaced by another from the East.

2nd.—That after the 13th Ta lei lama there would never be another. The present Ta lei lama is the 13th (others say he is the 12th) and even at his election there was a strong party against raising another, protesting against the inutility and waste of money caused by having one.

3rd.—There is a prophecy among the Buddhists, extracted from their scriptures, and much talked about by the Thibetan people, which assigns dates or terms for the duration of several Buddhist sects. According to these dates the Buddhist religion itself should pass away

about this time; and it is also said that it will be replaced by a religion coming from the south; not east as in the prophecy No. 1.

It is true that, as regards numbers and wealth, the Lamas were never so well off as now; but it is equally true that as far as respect from the people and moral strength are concerned, they were never so badly off. Their rapacity, disgraceful misconduct, and immorality have extinguished all respect for the class as a whole, leaving very few exceptions, personally respected.

4th.—This prophecy is to the effect that when a certain lake's water—probably the Tangri Nor or Nam Tso—runs low and becomes salt, then the Lama power will come to an end. This, in the matter of the water, is said to have already occurred. Now individually, perhaps, these prophecies might be of little value, but taken collectively, as indicating the presentiment or anticipation of a possible change in the established order of things, they may be taken as the straw to show which way the wind is blowing. Even on the principle of the wish being father to the thought they are interesting, if not instructive. Further, the effect they would have on the minds and actions of those interested in maintaining the established order of things is perfectly apparent, and may collectively be taken as a factor and added to the reasons by which to account for the 'exclusive' policy, if we may so call it, adopted by China in regard to Thibet."

The Contents of the *Indian Evangelical Review* for October are both varied and excellent. The Rev. J. L. Phillips of Midnapore begins with an article on "Christian Literature as a Missionary Lever for India." The Editor (the Rev. K. S. Macdonald) follows with two Articles (1) "The Secret of Buddha's success as a Propagandist" and (2) "The Religious and Moral Literature of India for 1883." Then come "the Social Idea in the Church" by the Rev. O. A. Kingsburry; "Swedenborg's claim to Inspiration" by Mr. C. E. G. Crawford of the Bombay Civil Service; "Should the Baptism of Converts be delayed, or should it immediately follow their profession of faith in Christ" by the Rev. G. Kerry. The Editor follows again with an excellent article on "the Government of India on the Indian Marriage Laws;" and Reviews of books, and Notes and Intelligence complete the number.

The Editor's last article is in many respects the most important, dealing as it does with a question of present day moment. It is a reply to the response of the Government of India to the memorials on the subject of the marriage laws as they apply to converts. We noticed this subject at the time the memorial in question was in preparation. The chief demand for relief is, as we then pointed out, in connection with female converts who are bound by infantile marriages to Hindus who may refuse to set them at liberty, while they themselves, neglecting the wife who has become a Christian, may marry any number of times. The demand for relief in this case is urgent, and even Hindu gentlemen of liberal views support it. Further, the memorialists merely asked for some such relief for Protestant Christians as is now accorded to Roman Catholics by the Canon Law recognized and upheld by the State. On this subject the Government of India in their unfavourable reply have certainly fallen into serious error; misinterpreting the statutory law of the land, and denying that Roman Catholics possess any such privileges as that specified by the memorialists. We quote Mr. Macdonald's reply *in extenso*.

"Among the rules of the Roman Catholic Church, as worded by high Roman Catholic authorities, and seen in I. E. R., Vol. ix, p. 482 we find:—

(1.) 'If an infidel had many wives, according to the custom of his tribe or nation, he was obliged after his conversion to the faith of Christ and before his admittance to baptism, to dismiss all his wives except one.'

(2.) 'If an infidel husband or wife agree to cohabit with the convert, but continues to blaspheme the name of Christ, and to bring influences to bear upon the convert so that his or her faith or morals might be gravely imperilled, the cohabitation would not be peaceable, and the convert should be bound, in defence of his or her eternal interests, to separate from the infidel party: the privilege of the convert is the same in such case as if the infidel party went away'; that is, he or she should be allowed to marry again, three months thereafter, if so inclined.

"This rule covers more than anything ever asked for by Protestant Christians. We never contemplated the re-marriage

of any female whose faith and morals would not be gravely imperilled by cohabitation with the infidel husband. And even such we would not re-marry within two years, not to say three months. In such a case the cohabitation would not be peaceable, and the convert would be bound, our Roman Catholic authorities add, 'in defence of her eternal interests, to separate from the infidel party.'

"Dr. Fennelly, Bishop and Vicar Apostolic, Madras, whose words, addressed to the Government of India, we are quoting, adds,—" Whenever an infidel husband or wife came over to the Catholic faith, it was incumbent on the Bishop, from the earliest times, to ascertain the intention of the Infidel party, and to give him or her (if necessary) three month's time for consideration, after explaining the privilege of the convert to take a Christian wife. The time allowed to the infidel party for consideration being expired, and he or she not consenting to peaceable cohabitation (as above defined) with the convert, the latter was thereupon without further delay entitled to take a Christian partner for life."

Dr. Fennelly expressly tells Government that he himself had received from the Pope 'the faculty of dispensing in the interpellation of married persons left behind in infidelity,' provided it was known to himself 'summarily and extra-judicially that the absent husband or wife cannot be admonished in legal form or, if admonished, has not signified his or her will in the time prescribed in the admonition,' (that is three months.)

"In the same connection, Dr. Hartmann, Bishop and Vicar Apostolic of Patna, quotes the decree of Pope Innocent III. on divorce which forms part of the Canon Law, and runs thus— 'If one of an infidel married couple be converted to the Catholic faith, and the other either refuses to cohabit with him (or her) or not without blasphemy of God's name, or so as to bring him (or her) into mortal sin, the deserted partner, if he (or she) choose may pass the second vows' (*i. e.*) re-marriage. The Christian wife as a matter of fact, cannot, except in very exceptional cases cohabit with a Hindu husband without blasphemy of God's name, or so as not to bring her into mortal sin. When such is the case, the Roman Catholic rule or Church Law allows her to re-marry whether the Hindu husband is pleased or not. This is more than the Protestants asked for.

"We think these authorities make it quite clear that the rules of the Roman Catholic Church do accord the extensive facilities for superseding a heathen marriage which had been supposed.

"But we are told, whether they did or not, that 'the Governor-General in Council is not aware that any statutory provision exists which gives them the force of law.' Here also we are still of opinion that statutory provision virtually exists for this very purpose. If not what can be meant by the following statutory provisions of the 'Indian Christian Marriage Act, 1872,' Section 5.

'Marriages may be solemnised in India —(1) By any person who has received episcopal ordination, provided that the marriage be solemnised according to the rules, rites, ceremonies, and customs of the Church of which he is a minister.' No one calls in question the episcopal ordination of Romish priests. Here then we have, as we think, a statutory provision which virtually gives the rules, as well as the rites and ceremonies of the Church of Rome, the force of law.

A marriage by a Romish priest is not legal when not done 'according to the rules, rites, &c., of the Church of Rome; and it is legal, no other provision being violated, when these rules are attended to."

QUERIES.

(1) *Is it possible to be an evolutionist and to believe in the creation of the world as recorded in Genesis?*

We believe that no purely scientific doctrine will ever be found to conflict with the Bible, when the latter is rightly interpreted. Such conflicts as have already arisen between science and the Bible, have arisen, we believe, either because the men of science were stepping out of their province, or because the theologians were interpreting the Bible from an erroneous standpoint. Science and the Bible look at things from different points of view. The business of science is to find out nature's uniformities or laws, whether these are in the physical or the mental sphere;

for it is by a pure conventionality that science is restricted, as it so generally is, to the physical. The Bible, on the other hand, looks at things from the religious point of view. It deals with nature as a manifestation of the Divine character and an instrument of the Divine purpose. "The heavens declare the glory of God." "For the invisible things of God, since the creation of the world, are clearly seen, being perceived through the things that are made, even his everlasting power and Godhead." "When I consider thy heavens the work of thy fingers, the moon and the stars which thou hast ordained; what is man that thou art mindful of him, or the son of man that thou visitest him? For thou hast made him but a little lower than God and crownest him with glory and honour. Thou madest him to have dominion over the works of thy hands." These quotations sufficiently indicate the point of view from which the Bible regards nature and man. It regards the world as God's creation and ordination, the manifestation of his character and the theatre and instrument of his purpose. What has science to say against that? Legitimately nothing whatever. Science deals with secondary and efficient causes, religion with first and final causes; if so, scientific and religious truths cannot come into collision with one another, for *there is no reason why they should not be true together.*

Now to apply these remarks to the question before us. The question is, can a believer in the Bible account of creation consistently believe in the scientific doctrine of evolution. That doctrine has not, we think been established *as a whole.* Darwin dealt with only a portion of it, *viz.*, the vegetable and animal series. And even this limited portion of the general hypothesis he did not claim to have proved, but only to have rendered probable. Much less can the general theory of evolution, which takes in the whole cosmos, be said to have been as yet taken out of the region of hypothesis. That general theory teaches, that the present state of the cosmos is the outcome of its original state, brought about with inconceivable slowness through continuous differentiations and integrations. The original state of the cosmos is assumed to have been matter diffused through space in a nebulous form and endowed with the energy of gravitation. In virtue of this energy the nebulous matter condensed around many centres, condensation giving rise to heat and rotatory motion. From one of these enormous, incandescent and rotating masses, there, from time to time, swirled off fragmentary masses, which became the planets of our solar system. In the course of long ages our planet having sufficiently cooled down and having in the process of doing so differentiated and integrated itself into air, water and *terra firma*, life came on the scene in the simplest form of vegetation. This primitive vegetation, by such causes as variation, struggle for existence and survival of the fittest, was gradually developed into the garden-flowers and forest-trees of the present day. Then to life there was added sentiency, and the animal series began. Here again, by the action of the above-mentioned causes, the developing process was continued, until the dawning sentiency of *Protogenes* culminated in the self-conscious reason, conscience and will of man.

Now, to come to the point of the question before us, we see no reason why we should not accept the above theory, if accredited by science, and yet continue to believe in the Bible account of creation. The salient features of that account are: (1) That God is the first cause of things. "In the beginning God created the heavens and the earth." (2) That God is not only the creator but the ordainer. He presides over the process whereby chaos becomes the cosmos. (3.) That the final cause or one part of the final cause of the creation and ordination of the world was that it might be a fit abode for man. Now none of these doctrines collides with the scientific doctrine of evolution, for science deals with evolution only as a process, or continuous result, brought about by natural causes, and has nothing whatever to say about its first, or final or supernatural cause. But it is just these that the Bible is mainly concerned with, and so transcendently important are they from the religious point of view, that it mattered but little in what phenomenal dress they

should be presented. That presentation would be the best that would most readily and impressively communicate the religious truths that were needed. It was of the utmost importance that the Israelites, who were chosen to be the recipients, conservators and transmitters of religious truth to mankind, and who had just emerged from contact with Egyptian idolatory, which sanctioned the worship as gods of the sun, the moon, the sky, the earth, the Nile and the huge monsters that infested its waters, should be taught that all these were but creatures of God and servants of man. Even if the Bible account of creation had been totally irrelevant to the conclusions of modern science, yet in fulfilling this high religious function, it would have been of inestimable value. But the Bible account does seem wonderfully harmonisable with the latest accepted conclusions of science. It plainly teaches, for example, that the work of creation was a gradual process. It occupied six days; and it is now generally admitted by commentators that these days may mean indefinitely long periods of time. Further it teaches that the work of creation was one of progress from lower to higher results—from the inorganic to the organic, from vegetable to animal, from brute to man. All this is in accordance with evolution. On the other hand, evolution has failed to bridge the gulf that lies between the not-living and the living. No minuteness of observation has sufficed to detect, and no skill of manipulation has sufficed to bring about, the emergence of the living from the not-living. *Omne vivum ex ovo* still remains as true as ever. But if we believe, as the Bible tells us, that the author of being presides over the development of being, it is easy for us to imagine that when, in the course of evolution, matter had become a fit vehicle for receiving it, the new property of life was imparted to it by Him with whom the Bible says "is the fountain of life."

Much has been made of the apparent discrepancy between the Bible account of creation and fact, in that the former represents light as having come into existence before the sun. But does not the doctrine of evolution teach that the nebulous matter must have become luminous ages before it was differentiated into the sun and planets of our solar system?

Our answer to the question then is, that our belief in the Bible account of creation need be no barrier to our accepting the doctrine of evolution at the hand of science. We have shown that the real significance of the Bible account is that God is the author of all things, that His is the intelligence that presides over the course of the world, and that He has a final cause or end to which under his guidance "the whole creation moves." Now these assumptions which are not scientific, but religious, will, so far as we can see, fit in with the theory of evolution quite as well as, or it may be better than, with any other theory.

(2.) *Does not the evolution theory destroy the difference between man and the lower animals, which is referred to in the Bible as man being created in the image and likeness of God?*

The Bible certainly says that God created man in his own image; also that God made man a little lower than the angels, or as the revised version translates it, "a little lower than God." And in conformity with this it is a physiological and a psychological fact that man is enormously superior to even the highest of the lower animals. Between man and the ape there is a great gulf, which science has not yet been able to bridge. Science must however bridge it in some way, if the evolution theory is to be accepted in its entirety; for no theory is more committed than evolution to the principle that *Natura non operatur per saltum* (nature does nothing by leaps). But suppose it bridged—suppose that amongst the discoveries of Paleontology one had been that of the "missing links" necessary to connect man with the ape, and that there were thus no excuse for rejecting the theory of evolution, yet, would not, asks our correspondent, our acceptance of that theory take place at the expense of our belief in the Bible account of man's creation. Not necessarily so, we venture to think. There seems to be nothing in the Bible account of man's creation that would preclude us from supposing (should science demand such a conclusion) that the work of man's creation assumed the form of raising the brain of some lower creature, through long ages and by imper-

ceptible gradations, to the size and complexity that characterize man's brain. And if so, then it is natural to suppose that the mental faculties of that creature were developed *pari passu* with development of its brain, until they became the human intelligence. We repeat, we see nothing in the Bible account forbidding us to suppose that God adopted this method in man's creation rather than any other. No doubt the Bible says that God made man out of the dust of the ground. But the same thing is said of the lower animals; and all that that statement can be fairly pressed to mean is that the elements of which man's body consists are the same as those found in the crust of the earth.

But the real "knot" of the question still remains unsolved. We mean the statement so emphatically present in the Bible account of man's creation and so conspicuous by its absence from the account of the creation of the lower animals, *viz.*, that God made man in his own image, or,—as the Bible otherwise expresses it,—that Adam was the Son of God. Do not these words imply that some part at least of man's nature is directly derived from God—that, in short, there is a divine element in man—an element that no development from the lower animals could account for? Well be it so. We think it is so, and yet we think we can see our way to hold this and yet accept, if necessary, the doctrine of evolution. Why may we not suppose that, in the course of the brain and mental development of man's immediate progenitor, there was a point at which he became receptive of a supernatural and Divine element, and that then, from its hidden source in Him who is the "Fountain of Life," a new and higher life was breathed into him and man became a "Son of God"? Now this is a supposition which it does not fall within the scope of the scientific doctrine of evolution either to deny or to affirm. But there are theories and theories of evolution. There are purely materialistic and mechanical theories of evolution which dogmatically deny God as the Author and End and Presiding Providence of all Creation and development. For example Oscar Schmidt in his *Doctrine of Descent and Darwinism* says: "In the last page of the *Origin of Species*, Darwin says: 'There is grandeur in this view of life, with its several powers, having been originally breathed by the Creator into a few forms or into one; and that, whilst this planet has gone cycling on according to the fixed law of gravity, from so simple a beginning, endless forms most beautiful and most wonderful have been and are being evolved.' In this concession Darwin has certainly been untrue to himself. It is directly incompatible with the doctrine of Descent, or, as Zöllner says: 'The hypothesis of an act of Creation (for the beginning of life) would not be a logical but a merely arbitrary limitation of the causal series against which our intellect rebels by reason of its inherent craving for causality. Whoever does not share this craving is beyond help, and he cannot be convinced. To hold the beginning of life as an arbitrary act of creation, is to break with the whole theory of cognition'"!

This we venture to think is not science, but metaphysics and very bad metaphysics too. When the man of science adopts the *role* of the metaphysician and tells us that the first article in our scientific creed must be that *there is no God*, or that *if there be, He has nothing to do with the world* perhaps the best answer would be *ne sutor ultra crepidam.*

(3) *Does it not necessitate the immortality of the lower animals if we believe in the immortality of man?*

What if it did? we may ask. What dreadful result would arise? But we do not think that the one belief does necessitate the other. We have shown that, granted evolution, there may still be a generic difference between man and the lower animals. Man may on that supposition, still have a direct divine origin. If so why may not immortality belong to man, or be conferred on him, to the exclusion of the lower animals? Why may not his direct spiritual connection with the supernatural raise him, at that crisis of life which we call death, into a higher and endless life?